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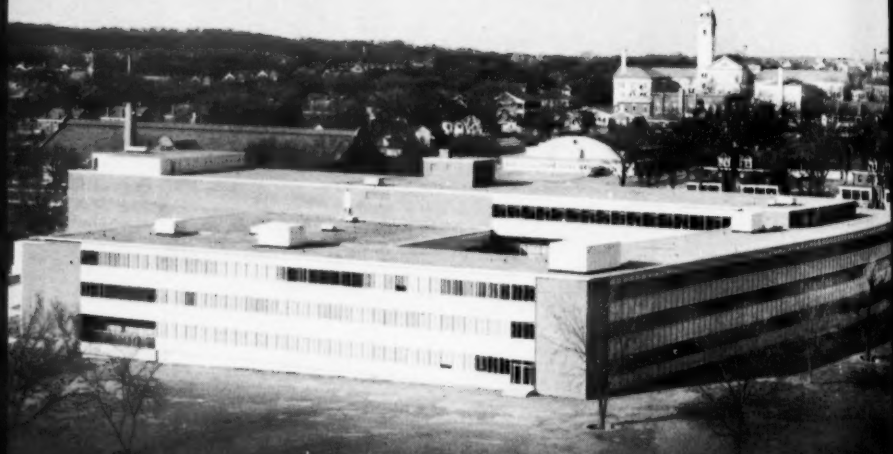
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THE ROAD TO WATERLOO

A Study in Logistics

Major Reginald Hargreaves, *British Army, Retired*



THE literature devoted to the military career of Napoleon Bonaparte would fill a large library. By contrast, that relating to his most tenacious opponent and eventual conqueror, Arthur Wellesley, 1st Duke of Wellington, could be accommodated on relatively few shelves.

The exhibitionist quality in all his activities, which has enabled the Corsican adventurer to be depicted in such vivid and scintillating colors, was altogether wanting in the quiet, undemonstrative Britisher. Yet not only did he shatter the legend of Napoleonic invincibility, but consistently inflicted defeat on the marshals trained in the Emperor's own school of war.

What was the secret of Wellington's ability to get the better of such talented

leaders as Junot, Marmont, Soult, Victor, and Masséna—and of Napoleon himself?

The answer must be that Wellington possessed an infinitely superior grasp of the science of logistics—then, as ever, the decisive factor in determining the issue when nations submitted their differences to the arbitrament of war.

Napoleon was educated in the classical military traditions of the prerevolutionary schools of instruction at Brienne and in Paris. He was, however, an omnivorous reader of the military writers of antiquity. All too early and all too faithfully he adopted the principle epitomized in Cato's dictum that "War should be made to support war." It was, moreover, a precept strongly reinforced by the circumstances prevailing at the time.

In marked contrast to the flamboyant but reckless Napoleon, the Duke of Wellington possessed a superior knowledge of the science of logistics and personally supervised his departments of supply and transport

First Independent Command

The little Corsican's first independent command—that of the army of Italy—came at a time when the fledgling Republic's finances were at their lowest ebb; when logistic support for the armies in the field was on a scale far below their legitimate requirements. Short of supplies of every description, the ragged, half-famished troops of the army of Italy could only be spurred to effective action by an assurance that their current state of misery and privation would be alleviated speedily. With his inherent sense of opportunism, that is precisely the line the 26-year-old general adopted:

Soldiers you are hungry and naked; the Republic owes you much, but she has not the means to pay her debts. I am come to lead you into the most fertile plains the sun beholds. Rich provinces, opulent cities—all shall be at your disposal if you arrive where I direct and follow me where I shall lead.¹

This, of course, was sheer banditry, an appeal to the pillager that lies very close to the surface in any body of troops lacking in the restraining influences of discipline and tradition—as was notoriously the case with the armies of the 1st French Republic. But whatever its moral dubiety, the invocation undoubtedly brought about results. The rich plains of Lombardy provided food as the magazines of Arcole and Mantua restocked the empty *fourgons*, while the Papal coffers replenished the depleted Republican treasury to the tune of a million and a half sterling.

This reversion to the hand-to-mouth me-

¹ *Memoirs of Napoleon. F. de Bourrienne.*

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dieval system of "living at free quarters," however, had created a dangerous precedent, and the fidelity with which Napoleon continued to employ it contributed materially to his ultimate undoing. Few contemporary *terrains des operations* were so fruitful as Italy, and the belief that war always could be made to support war was speedily proved to be fallacious.

Portent of the Future

Thus in spite of the ample supplies available at his Egyptian base, the Corsican's logistical arrangements for his invasion of Syria and Asia Minor were sketchy in the extreme. As in Italy, it was decreed that the army should live on the country; and the easy capture of Gaza, whose resources furnished rice and biscuit in sufficient quantity for a fortnight's full-scale subsistence, lent plausible encouragement to the design. Yet the approach march from Qatiya to Gaza should have embodied its own warning of the probable shape of things to come. Napoleon wrote to Desaix:

We have traversed 170 miles of desert, we have had to subsist on the flesh of dogs, asses and camels. What water we found on the way was salty; more often there was not a drop to be had.

Conditions were to deteriorate still further as the army moved doggedly toward Jaffa. Rain was incessant. The infantry was called upon constantly to help manhandle the field guns, bogged down in the sodden sands for want of that additional width to their wheel-felloes which the peculiar nature of the terrain demanded, but which Napoleon—an artilleryman—had failed to provide.

By the time Jaffa was reached supplies had dwindled alarmingly. At the same time, the bombardment of the city made heavy inroads on the reserves of ammunition, already seriously depleted by the heavy expenditure involved in the capture of El Arish. In addition, reserve stocks were not getting through.

Confronted with 4,000 prisoners, Napoleon angrily demanded, "What would you have me do with these? I have no provisions to feed them, nor ships to transport them either to France or Egypt." Since the troops were already complaining bitterly at the very thought of "their bread being given to their enemies," the unfortunate captives were marched down to the seashore and there methodically shot down in batches²—victims of a logistical organization whose inadequacies every successive day served to reveal with increasing clarity.

Jaffa itself yielded an adventitious stock of powder, food, coffee, sugar, and tobacco which was amplified when an unsuspecting Turkish convoy, laden with wheat and oil, sailed into the port. So the march was resumed toward the next obstacle in the conqueror's path.

Napoleon had estimated that Acre's reduction would take no more than a matter of days. As the weeks slipped by without any appreciable weakening on the part of the stronghold's garrison, or the British squadron supporting it, the consequences of logistical neglect began to declare themselves in no uncertain fashion.

Entirely failing to appreciate the potency of seapower, Napoleon had arranged to move his siege train by water. Half of it promptly fell into the hands of a watchdog British squadron. The balance, putting back to harbor, set out overland to join Napoleon under Acre's walls, even more gravely delayed by the want of proper wheel-felloes than the lighter field artillery had been in the earlier stages of the campaign. The consequent dearth of shot in the besiegers' lines was only partially remedied by the salvaging—at five sous a ball—of the 12- and 32-pounder missiles fired into the assault positions by the British Fleet.

After 60 days of fruitless effort, with

the casualties of nine costly assaults on his hands in addition to the mounting roll of those stricken by the plague, with little ammunition, and the bottom of the barrel scraped for rations, Napoleon had no option but to abandon the siege and beat a hasty retreat. With seapower to support the defense, it is by no means certain that he would have captured Acre even if his logistics had been well-planned in conference and efficiently organized in the field. With the haphazard arrangements by which the entire enterprise had been characterized, the chance of success had been fatally jeopardized from the very outset.

Logistics of Plenty

Thrashing about Central Europe, the French Emperor enjoyed a certain degree of what Rear Admiral John D. Hayes, United States Navy, has termed "the logistics of plenty." But unless it be organized, plenty is only something that can be prodigally wasted. In any event, as the pressure of the British blockade of all the Gallic entry-ports progressively exerted its power of strangulation, the logistical situation on the continental mainland exhibited slow but steadily increasing deterioration. Austerlitz marked the zenith of the Corsican's military prowess, and the peak of his logistical-plenty curve.

Having revived the concept of "total" war—the harnessing of an entire nation and its willing or unwilling satellites to the wholesale business of conflict—the nemesis of a precariously underpinned gargantuanism inevitably caught up with him. For even the relatively simple logistical demands of contemporary strife were bound, sooner or later, to impose too great a strain on an economy still in a comparatively rudimentary state of organizational development. The Emperor did not have sufficient understanding of the economic problems involved to rationalize his logistics so as to ensure the means by which his grandiose ends conceivably might be consummated. Yet so long as he

² De Bourrienne, *op cit.*, *Bonaparte's Adventure in Egypt*, Lieutenant Colonel P. G. Elgood, *History of Napoleon* (Volume I) George Moir Bussey.

confined his activities to the traditional European cockpit, fortuitous local sources of supply could be laid under contribution partially to make good the grave deficiencies in his over-all logistical organization.

That the process of "living on the country" was beginning to run into difficulties, however, even so early as the campaign of 1805, is borne out by a dispatch sent by the chief of staff to Marmont during the approach march leading up to the Battle of Ulm. "In all his letters," Berthier protested, "General Marmont is always referring to the commissariat. I repeat that in a war of invasion and of rapid movement which the Emperor is waging, there can be no depots, and the Generals in command must themselves see to it that they procure the necessary supplies from the countries which they traverse." This was no more than banditry reduced to a formula.

Russian Campaign

It was when the Emperor plunged into the arid wastes of Russia, however, that the astounding imperfections of his logistical thinking were clearly revealed.

To employ an enormous army only to achieve failure is proof of one of two forms of folly. It may show that the commander has made his host so large that it is stultified by its own unwieldy proportions. Equally, it can demonstrate that he has undertaken a task that no force could possibly fulfill. Napoleon was guilty of both blunders, and of the additional error of neglecting his logistical support to the point of sheer insouciance.

It was an extraordinary polyglot array that made the passage of the Niemen on 24 June 1812. Less than half of the 500,000 infantry and 100,000 cavalry were Frenchmen, although the Gallic proportion among the men serving the 1,200 field pieces was slightly higher. Supply arrangements—such as they were—differed from contingent to contingent, and entirely lacked integration and comprehensive centralized control. There was no Quartermaster

General; such logistical organization as existed was under the direction of the relatively junior *Général de Division*, Mathieu Dumas. The comparative unimportance attached to his department is witnessed by the fact that, from the outset, the word had gone forth that "the troops were to be supplied at the expense of the country."

What this entailed, even before leaving Prussian soil, is revealed by Schön's report on Marshal Davout's sack of Gumbinnen which arose out of a frantic search for supplies, and the outrageous misconduct of Marshal Ney's 3d Corps incensed by the lack of the most elementary necessities. For "the discipline of the French army was so shattered by years of organized brigandage that the rest naturally followed."

That even such organization as the Emperor's system of logistical banditry normally boasted was quite incapable of coping with conditions in the Russian barrens soon was made starkly apparent. It was all very well to issue orders for the construction of bakeries at every halting place, but both fuel and the necessary raw material to feed the ovens were conspicuously lacking. It was a state of affairs which progressively worsened as the armies thrust farther and farther into the heart of Muscovy, and the distance lengthened between the marching columns and their main depots. These were situated at Modlin, Thorn, Pillau, Danzig, and Magdeburg, dangerously far back, as was made painfully evident when Napoleon's three abortive attempts to pin down the Russian main army—at Vilna, Vitebsk, and Smolensk—well-nigh exhausted the reserves in his ammunition caissons.

Bread made from local rye, which turned the men's stomachs and aggravated the colic and dysentery from which many of them already were suffering; moldy fodder that cost the lives of 10,000 horses in the 55-mile march from Kovno to Vilna; half empty *fourgons* and dwindling teams

with the field guns; and a "scorched earth" policy ruthlessly carried out by the Russians to deny the invader what little the countryside would otherwise have yielded—these were the inflictions that all ranks were called upon to endure in what was merely the *advance* on Moscow.

Moscow

Napoleon entered the suburbs of the capital late in the evening of 14 September, taking up quarters in the Kremlin on the day following. A good store of supplies had been left behind in the burning city, and although a quantity of provisions perished in the conflagration, a large and most welcome stock of powder and shot was rescued from the eager flames. This was indeed valuable booty, since the Battle of Borodino alone had seen the expenditure of over 90,000 rounds of artillery ammunition. Supply trains coming up from Kovno were constantly raided by Cossacks and the bands of partisans that haunted the vulnerable 700-mile line of communications.

For over a month Napoleon lingered on in Moscow in the fond hope that his covert overtures to the czar would yield him an offer to negotiate that could be dressed up to look like an advantageous treaty.

Since the entire countryside had been laid waste for a breadth of 50 miles and more by the destructive passage of two great armies, the troops in and about Moscow perforce lived from hand to mouth. Although the Emperor had hoarded all the flour he had come across in the capital, he refused to sanction its issue even when Berthier reported Pino's Italian division as being completely destitute. But if subsistence was hard to come by, nonperishable stores were entirely wanting. Boots, clothing, and equipment were patched and threadbare, but no replacements were available even for the favored Imperial Guard.

With the early northern winter in sight, no preparations were made for rough-

shoeing the horses which were in bad shape for want of adequate forage. The belated order for the provision of hand-mills would have made more sense had there been any corncobs to grind. Then to add to the difficulties of the existent logistical problem, during the latter half of September reinforcements numbering 10,000 infantry and over 4,000 cavalry were added to the ration strength. A further 17,000 effectives reported early in October, while the artillery park and the ammunition train continued to increase just at the time when the enfeebled gun teams were dying off by scores.

Retreat

As October drew to a close the order went forth for a general retreat.

By rigorous hoarding, sufficient provisions had been accumulated for the issue per capita of rations for 10 days. However, such was the lack of discipline with the majority of the troops that the bulk of their subsistence was either thrown away to make room in the packs and haversacks for a mass of loot, or irresponsibly wolfed within the first few days. The tumbrils which should have held the reserve rations, when not crammed with powder and shot, were weighed down with personal baggage and piles of booty; although the teams which drew them were so undernourished that hundreds of horses were left dying from exhaustion before the Kremlin's walls were lost to sight.

With the exception of the Guard and the indomitable rearguard, march discipline simply did not exist. The troops straggled along in a manner which made it easy for a swarm of marauders to slip away from the shambling, formless columns in search of food and drink. So out of hand had the men become, indeed, that the monastery of Semenovski was set ablaze out of sheer wanton mischief with the total loss of the substantial stock of provisions stored within its walls.

With the Russians on both flanks and

pressing hard on the rear, Murat succeeded in losing 3,000 of the precious cavalry at Winkovo, while Prince Eugene's desperate and costly attempt to clear the enemy out of Maloyaroslavets deflected the line of march to the old desolated road to Smolensk.

Then winter struck with blinding snow and a biting, paralyzing cold that almost brought the tatterdemalion army floundering to a standstill. The overworked horses perished as much from thirst as from want of forage. Improperly shod, once they fell many of them were too feeble to struggle up again. The abandonment of many transport vehicles for lack of the necessary teams to draw them entailed the loss of much of the scanty supply of food still held in reserve.

Quite early in events, all attempts at running an organized supply service broke down hopelessly. Almost without exception it was a case of every man for himself and the devil take the hindmost. At the head of the ragged columns the marauders wantonly set fire to the villages through which they passed, thus robbing those who followed of the scant but welcome shelter these congeries of hovels otherwise would have afforded. Typhus broke out and spread with lightning rapidity, since men did not hesitate to strip its victims of their tattered, lice-ridden clothing, and thus the scourge was passed on from the dead to those still clinging to existence. "Every bivouac was the graveyard of hundreds of men and thousands of horses; and the line of march resembled an elongated battlefield." The medical service—an integral part of the logistical apparatus—had virtually ceased to exist. By the time ravaged, famine-stricken Smolensk was reached, it had been found necessary to abandon 140 pieces of artillery, and there were scarcely enough cavalymen left to carry out a reconnaissance.

The return crossing of the Beresina, under constant pressure by the Russians,

took a further heavy toll in casualties. Out of the 124,250 of all ranks who had set out from Moscow, not more than 25,000 remained under arms when at last the haven of Kovno was gained. The returns would have shown even a smaller total had they not included the reinforcements that had joined the army at Smolensk.

Such were the consequences of substituting a form of brigandage for a fully integrated logistical organization, for logistics constitute the mortar holding together that elaborate military edifice we term an army in the field.

In effect, Napoleon had failed entirely to grasp the fact that war can be made to support war only if the scope of operations and the number of troops employed is strictly limited, and victory speedily achieved over an opponent rich enough to foot the bill presented by the conqueror.

Small wonder that, reviewing his career in the ample leisure afforded by detention on St. Helena, the *soi-disant* Emperor could affirm solemnly that "Nothing is more calculated to disorganise and ruin an army altogether than plunder." To which the corollary is, that nothing is more likely to sustain an army and help it to victory than a soundly organized system of logistical support.

Wellington

In marked contrast to the flamboyant but reckless little Corsican, the Duke of Wellington insisted upon a sound logistical basis for all his operations, and in the minutest detail personally supervised every department of supply and transport that came within his purview.

As a youthful lieutenant colonel, Arthur Wellesley—as he then was—first smelled powder during the retreat on the Ems which in 1794-95 brought to an inglorious conclusion the first allied campaign against the French Revolutionary forces. With the British contingent driven ignominiously from the field, it was a singularly inauspicious introduction to active service; but

as the fledgling commanding officer himself somewhat ruefully confessed, "At least it taught me how things should not be done"—both tactically and logistically.

Wellesley's next service was in India—an India where preparations for a campaign against Tipu Sahib, Sovereign of Mysore, were going forward on orthodox but extremely leisurely and cumbersome lines.

It was in vain that the newcomer advocated, for example, the establishment of advance bases, with supplies, munitions, stores, and an adequate quantity of transport. His commander, George Harris—a veteran of the War of Independence—was accustomed to campaigning in the traditional way, "whereby armies took the field as a ponderous machine with arsenals and magazines, which they always carry with them." So with 180 miles of difficult country to traverse, the advance on Seringapatam of a force of British and native troops totaling 36,000 was made in two columns, moving in hollow square, with a cavalry screen thrown out in advance and to the rear. This square had a front of three miles and a depth of seven.

*Within it was a moving city, containing about 150,000 camp followers, about 120,000 bullocks . . . and elephants and camels and horses and asses, in fact, a confusion of trumpeting and squealing and braying and lowing, mingled with the yells of men, the chatter of women, and the crying of children.*³

Since so vast a concourse of animals constantly needed food, Tipu's cavalry busied itself in laying waste to the country ahead of the most likely line of advance. Harris was, therefore, obliged to pursue a zigzag course, taking any direction where forage might be found—a procedure which added immeasurably to the length of the approach march and to the bulk of the supplies needed to sustain the force. All too soon it became obligatory to abandon

many of the superfluous stores, while bullocks were perishing on every hand for lack of sustenance, thereby appreciably reducing the scale of the meat ration available.

Eventually, Seringapatam was reached, assailed, and captured—but at five times the cost in lives and treasure that Colonel Arthur Wellesley deemed necessary. Once again he was discovering "how things should not be done," and carefully storing up the lessons learned for future guidance.

Command

Independent command, when it came, served to underline the precepts derived from his earlier experience and his conclusions were summed up in a letter to his brother, the governor general. Wellesley wrote:

The only mode in which we can inspire either our enemies or our native allies with respect for our operations will be to show them that the army can move with ease and celerity at all times and in all situations.

There was to be no more lumbering forward in a huge hollow square with a moving city in the midst of it. Transport and supply were to be put on a proper organizational footing, with all superfluous "followers" eliminated, and cumbersome wheeled transport vehicles replaced, wherever possible, by pack animals. These were amply fed and cared for with such scrupulous attention to their well-being that it was forbidden to goad the bullocks into a trot. "If I had rice and bullocks," Wellesley subsequently affirmed, "I had men; and if I had men I knew I could win battles." This was the authentic voice of the commander who had been at pains to have a private soldier and his equipment weighed so that a reasonable balance might be struck between the man's own weight and that of the load he carried.

All this meticulous care over the problems involved in the governing factor of logistics was rewarded amply by the out-

³ Wellington, Honorable Sir John Fortescue.

standing success attending Wellesley's campaign against the Marathas—an enterprise carried through with astonishing economy of means and at a pace that, for India, was unprecedented.

Shortly after, the "Sepoy General"—as Wellesley sometimes was slightly referred to—returned to England. Yet for all his success in India, it was some years before he was given the chance to distinguish himself further.

Portugal

It was not, indeed, until he was sent to take over the command of the British Expeditionary Force confronting the Napoleonic legions in Portugal that he was invested with a responsibility calculated to exhibit the full range of his military talent. How conscientiously he buckled down to his task is witnessed by the fact that even on the passage out to Lisbon he set busily to work on the logistical problem involved in maintaining a force of 14,000 men in a strange country, and with such a meager supply of animals as he had been allocated as gun-teams and bathorses.

As a *terrain des operations* Portugal always could be relied upon to furnish beef and wine, and it was reasonably self-supporting in bread as long as the water still flowed in the mill streams, which was for about seven months in 12. But the roads were so bad that virtually all supplies had to be transported by pack animals or in primitive, slow-moving native carts hired locally at rates that struck one subordinate commander as scandalously extortionate. Brigadier Robert Ballard Long wrote:

The expenses of the Army are incredible. With mules hired at a dollar a day, with forage, and many contractors disposing of upwards of fifty of the beasts, they absolutely realise per diem a better salary than the Commander-in-Chief himself receives.

This was just one of the things that had to be accepted. So the "Sepoy General"

concentrated on drawing up exact tables for the mules' respective loads, and apportioning the bread, meat, spirits, and reserve artillery ammunition between the 307 local carts the commissaries had managed to assemble. Pack mules were allocated for the transport of 520,000 rounds of ball cartridge, for the regimental medicine chests, and for the entrenching tools. At the same time, the most meticulous orders were given for the disembarkation of the reinforcements from Gibraltar. Nothing was forgotten, from details of the subsistence and personal kit to be carried by the individual man, to the assignment of "a careful serjeant" to look after the baggage left in the ships. The landing order ended with the salutary reminder that "Each soldier will have with him three good flints," for Marshal Junot was marching upon Lisbon, and there soon would be plenty of work for the British Redcoats' "Brown Bess"—a weapon inclined to be heavy on its sparking mechanism.

One of the "Sepoy General's" abiding nightmares was the acute lack of specie. English paper money was not negotiable in Portugal and Spain except at ruinous rates of discount, while Prime Minister Pitt's subsidies to England's allies had long since drained away all but an inconsiderable reserve of the country's gold. In consequence, the troops' pay was invariably many months in arrears, as were the local disbursements for food and forage. This was mainly the outcome of the system—if such it can be called—whereby a civil department of the Treasury assumed responsibility for all military expenditure. A commander in chief, to whom the lives of some tens of thousands of his fellow countrymen had been cheerfully confided, was not esteemed sufficiently trustworthy to have the handling of a single penny piece of his country's money.

Where the supply services were concerned, confusion was made worse confounded by the fact that different depart-

ments were responsible for the wagon and its load. Subsistence and munitions were a military charge, while transport was a service controlled by the civil authorities. In the theater of war itself commissaries, more or less amenable to military discipline, exercised a precarious quasi-authority over teamsters subject to no disciplinary restraint whatsoever. All in all, although they were consistently denounced and reviled and not infrequently threatened with summary hanging, it can truly be said of the men working under Commissary General Robert Hugh Kennedy that they carried out their extremely difficult and vexatious duties with commendable skill and fidelity.

Detailed Instructions

The "Sepoy General's" terse, clearly worded memoranda set out precisely and exhaustively the nature of the supplies he required, where and when they were to be on hand, the number of carts and pack animals to be employed, and all the necessary calculations involved in regard to time and distance. "To guide a biscuit from Lisbon into a man's mouth," he pointed out, "is a matter of vital importance, for without biscuit no military operations can be carried out." That the troops rarely went short of biscuit, or any of their other logistic requirements, is testified by the entry in the journal kept by Sergeant Wheeler of the 51st Foot. He wrote:

There were two things we could be certain of. First, that we should always be as well-supplied as the nature of the service would permit. The second was, we should be sure to give the enemy a damned good thrashing.

It was all very well for Napoleon to pore over the works of the great Comte de Guibert and proclaim his overweening military genius. It was Arthur Wellesley who gave practical expression to Guibert's sound dictum that "provision waggons should be proportionate to the force em-

ployed and to the nature of the country in which it is intended to operate."

After the early encounter battle of Talavera of July 1809, the British, with their limited wagon train largely devoted to the removal of their 2,000 wounded, were temporarily at the mercy of the Spanish military service of supply. This is only another way of saying that for some days the dog-tired Redcoats had no food other than a little boiled wheat, a handful or so of parched peas, and the flesh of a few wild hogs they stumbled across and incontinently slaughtered. Faced with this situation, the "Sepoy General" promptly reassumed full responsibility for his own logistics—to the infinite relief of every officer and man under his command.

It was not so long after Talavera that the British commander deliberately employed his grasp of logistics to the direct development of his strategic design. Aware that Marshal Soult's forces were under orders to "live on the country" where virtually all essentials were concerned, Wellington blandly retired behind his well-stocked and unassailable Lines of Torres Vedras. The French were left to try and support themselves in a terrain swept bare of all crops, its roads destroyed, its woods cut down, the banks of its streams scarped, and its villages razed to the ground. Since the Gallic lines of communication had to traverse the entire breadth of Spain, and were under constant raid by bands of active and resourceful guerrillas, Soult's army corps was soon on the verge of destitution. So desperate was the situation with regard to rations that one hungry soldier scribbled on the door of his battered billet, *Un bon soldat devrait avoir la force d'un cheval, le coeur d'un lion, et l'appétit d'une souris* (A good soldier should have the strength of a horse, the heart of a lion, and the appetite of a mouse).

In effect, throughout his Peninsular campaign Wellington took the fullest advantage of the fact that while the French

might concentrate to fight, to subsist they were forced to disperse.

It is true that in the British strategic retreat from Burgos of 1812 largely brought about by the lack of specie with which to purchase provisions locally, there undoubtedly were certain temporary shortages. For a time the commissaries' arrangements for forwarding supplies were thrown into such confusion that some of the Redcoats were glad to supplement their meager dole of rations with a handful of roasted acorns. But the situation was restored speedily. Moreover, Wellington had the satisfaction of knowing that while his men were falling back—at their own pace—upon well-stocked bases, over 100,000 Frenchmen were marching ever farther away from such inadequate supply depots as Soult had succeeded in establishing.

There could be only one outcome to this state of affairs, and the swing of the pendulum that came in 1813 was as much a triumph for shrewdly controlled logistics as it was a tribute to the prime fighting quality of the Anglo-Portuguese troops.

Concern for Troops

Wellington's sound grasp of logistics and his abiding concern for the physical well-being of his troops rendered him a sworn foe of the hastily improvised bivouac. He stated:

The system was begun during the French revolution when the lives of men were cheap. But the practice of bivouacking prevents the men getting proper rest. They sleep for an hour or two when too drowsy to stay awake any longer, but nothing is calculated to wear out troops more effectually.

For the last three years in Spain, therefore, the commander in chief was at infinite pains to get all his men under canvas whenever they could not be accommodated in proper billets.

Wellington had perceived very quickly that men—although thirsty all the time

—do not demand much food during continuous action or throughout periods of severe strain. It followed that this was the time to cut down on rations and stock up on ammunition, since maximum quantities of both are rarely wanted at the same time. But as soon as a general engagement started to die down, not only full but increased rations were issued whenever possible with a few "extras" thrown in if they could be acquired by legitimate means.

Wellington's sound logistical condition was, of course, a tribute to the seapower which not only kept the swarm of Spanish guerrillas equipped and supplied, but shepherded the supply ships of many nations safely into Lisbon harbor. "The American vessels are pouring in with provisions," recorded Brigadier Long in 1810, "and the Army have a supply of eight months' flour in store."

It was a very different story when in 1812, "Mr. Madison's War," as indignant Boston shipowners were known to term it, sent a swarm of active and enterprising American privateers to prey on British shipping in the North Atlantic. Fortunately, this new complication almost exactly synchronized with the beginning of Napoleon's decline; the struggle on the European mainland took a favorable turn just as the oceanic peril came into being. Had hostilities between Great Britain and America broken out in 1809 or 1810, their influence on the course of events would have proved infinitely more detrimental to the allied cause than, in fact, was the case.

Les vivres? Napoleon had once pronounced. Ne m'en parlez pas.

Wellington, on the other hand, roundly affirmed that: "A starving army is actually worse than none. The soldiers lose their discipline and their spirit. They plunder even in the presence of their Officers. The Officers are discontented and almost as bad as the men."

These antithetical viewpoints were never

more sharply in evidence than throughout the brief campaign that ended on the field of Waterloo. With both armies hasty improvisation had been the keynote of such preparations as had been put in hand. Napoleon was hard pressed to conjure up munitions, weapons, equipment, subsistence, and the necessary animals—having to mount some of his cavalry on horses taken from the rural gendarmerie. Many of Wellington's best troops of Peninsular days were overseas and unable to concentrate in Belgium; while the rundown in military supplies of all types, so characteristic of a democracy during the immediate aftermath of a major war, sent him into the field committed to extemporization at every turn.

Yet it was entirely characteristic of the two men that whereas Napoleon's forces

faced up to the tussle on the slopes of Waterloo with nothing more substantial in the way of a morning meal than a few potatoes snatched out of the fields, Wellington's troops were regaled with a breakfast of "stirabout" and biscuit, washed down with a pannikin of tea generously laced with spirits.

Conclusion

In a war of materiel, such as modern science has inflicted on the fighting man, a high standard of morale can only be the outcome of a well-integrated, smoothly working logistical organization. Whereafter, if we take the Quartermaster as symbolizing all that we mean by logistics, there can be no gainsaying the profundity of Erwin Rommel's dictum that, "Before the fighting proper, the battle is fought and decided by the Quartermasters."

For many ages the conflict of war was a loosely organized affair.

The cave man's logistics problem was simple—he needed a club and possibly a mate.

Then man became civilized to the point where he could wreak greater destruction with organization than without it. He massed his armies against other armies and organized his logistics accordingly.

It was not until our own era, however, that science was systematically and thoroughly exploited for war purposes.

As a result today, warfare is radically different than it was at any time in the past. Wars are not fought exclusively on the land, on the sea, or in the air. They are also fought in the laboratory, in the factory, and along the supply and communication lines we call logistics. Efficiency on the logistics front is vital to our national survival.

*Assistant Secretary of Defense Perkins McGuire
(Supply and Logistics)*

THE BUNDESWEHR

Major Edgar O'Ballance
Sherwood Foresters, Territorial Army, Great Britain

AFTER the Second World War, the defeated Wehrmacht was disbanded completely by the victorious Allies. The German nation, stunned by its second defeat in 27 years, was forcibly divided and occupied. Both East and West breathed propaganda into the German people and a barrier was erected by the Soviets between the two divisions of the country. Western Germany was disarmed and demilitarized, and for some time marked time as she recovered painfully and slowly from her battering.

Now, more than 14 years later, a new military force—the Bundeswehr—has gained in strength to the point where it constitutes a major contribution to the North Atlantic Treaty Organization (NATO) alliance.

It may be of some interest to trace its early struggles.

Political Revival

Western Germany, controlled by the Allies, had a population of about 53 million. She became a democratic Federal Republic with a parliament of 497 seats known as the Bundestag, located at Bonn. The members of the parliament were elected by proportional representation. Berlin, the old capital, situated well inside the Russian Zone, was divided into sectors controlled by Great Britain, America, France, and Russia.

In the first election, in 1949, many po-

litical parties competed, but they were reduced to 12 at the next election in 1953. The strongest parties were the Christian Democrats led by Dr. Konrad Adenauer, and the Social Democrats led by Erich Ollenhauer, both of which were hostile to communism. The dominant political figure was Adenauer who rose to lead Western Germany and become her Chancellor.

The country made a quick recovery economically, and became an independent sovereign state in 1955. On 1 January 1957 the industrial Saar, rich in coal, became the tenth state.

NATO

If there had been any doubt, the blockade of Berlin, which began in June 1948, was a clear indication of the Soviet attitude toward the West. It resulted in the formation of NATO in April 1949.

The final act of the London Conference (September-October 1954) provided for the admission under effective reservations of a sovereign and rearmed West Germany within the coalition of Western Europe. Great Britain, France, and the United States supported the restoration of West German sovereignty and the termination of the occupation as soon as possible. West Germany was invited to become a member of NATO, with a scheduled contribution of 12 divisions and 1,000 tactical aircraft to be devoted to alliance security rather than unilateral use.

The Bundeswehr—new military force of Western Germany—has established itself and has gained strength to a point where it constitutes a major contribution to the North Atlantic Treaty Organization alliance

The German Federal Republic officially became a sovereign state on 5 May 1955. West Germany joined NATO four days later, on 9 May.

Herr Theodor Blank was appointed Commissioner for Security when it became apparent that, in preparation for the contingency, a Western German Army might have to be raised at the end of 1950. He formed a small secretariat, which became known as the "Blank Office," to study the factors involved in building an army from nothing. It contained a number of ex-Wehrmacht officers, and one, General Adolph Heusinger, played a leading part in its affairs, eventually being appointed chairman of the Military Advisory Board in 1955.

The planners had to start from the beginning. Not a vestige of the old Wehrmacht remained in existence, and there was discussion as to what type army Western Germany was to have. Blank favored a citizen type army, as did Adenauer, in which the rights of all individuals would be safeguarded carefully. It was to be under civilian control.

First Volunteers

The "Volunteer Bill" was passed by the Bundestag in 1955, but not without difficulty. Its object was to authorize the enlisting of volunteers to form the framework for future expansion.

The volunteers, especially the officers, were screened carefully and before being accepted were given a preliminary four-month trial course. For a limited period in 1956 members of the Frontier Police were allowed to transfer.

After the initial impetus, volunteers

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came in very slowly and early recruiting figures were disappointing. By October 1956 only 53,000 of the 90,000 desired for the period had been enrolled. Appalled by the heavy loss of life and property in the war, the Western German people viewed the new military setup warily.

Buildup

Of the 500,000 men planned (which included both the air force and the small navy) about 150,000 were to be absorbed into the 12 divisions for NATO, and the remainder were to be employed in corps troops, training establishments, line of communication units, and home defense. Of the 12 divisions, four were to be armored and the remainder motorized. In September 1956 Supreme Headquarters Allied Powers Europe again estimated that it needed at least 30 divisions to form its defensive shield in Central Europe. The troops on the ground fell far short of that number.

The Bundestag had absolute financial control over the Bundeswehr through the Minister for Defense, who had overriding authority in time of peace. In time of war the Chancellor took over control. The Bundeswehr consisted of the three services—the army, the navy, and the air force. The Ministry became divided into two sections, one known as "Department IV," and the other as the "Territorial Defense Office." Broadly speaking, Department IV was responsible for all the operational troops, while the Territorial Defense Office was responsible for static formations and coastal defense.

In March 1957 General Heusinger became the Chairman of the Military Council, and took charge of Department IV, having directly under him the heads of each of the three services. The defense budget averaged about two billion dollars at this time.

Meanwhile, in October 1956, Herr Franz Josef Strauss had taken over the post of Minister of Defense from Herr Blank.

Strauss, formerly the Minister for Atomic Affairs, held slightly different views on some defense problems. He was more prepared to listen to the advice of the military experts than was his predecessor, and prepared to build up the military machine on sound lines.

Strauss reviewed the manpower figures and targets, and decided that they were

Conscription

There was considerable opposition to conscription from some political parties and the trade unions. However, in 1956 bills were passed by the Bundestag which decreed conscription for a period of 12 months. Conscripts could volunteer to serve 18 months, and then were allowed to select their unit. NATO was openly



The new German Army—Adenauer reviewing troops at training center, 1956

too high. He substituted the figure of 350,000 for the original 500,000, and retarded the expansion rate. He realized clearly that conscription would be necessary if planned strengths were to be met. In spite of the acute shortage of junior officers, he would not grant short service commissions, nor would he enlist ex-war-time noncommissioned officers to meet the current shortage, as he was determined not to develop a middle-aged army.

disappointed at such a short term of service which was not long enough to train technicians and junior leaders, thereby requiring that such personnel be either regulars or volunteers.

It was estimated that up to 300,000 conscripts would be available every year. It was planned that the NATO divisions and supporting troops would absorb up to about 140,000, the remainder going to the Territorial Defense Command. It was

hoped eventually to build up a trained reserve of about one million men. The Ministry of Defense was suitably enlarged to cope with this expansion.

Early in 1957 the first batch of conscripts was called. It consisted of only 10,000 men, of whom about 6,000 had volunteered to serve for 18 months. The main reasons given for such a small number were shortage of accommodation and lack of training facilities. A second group of similar size, called up later in the year, had about the same proportion of volunteers.

By October 1957 the strength of the Bundeswehr—volunteers and conscripts included—was about 110,000.

Strategy

There were differing views on the best strategy to adopt since the Western Germans were not convinced that the NATO policy for defense necessarily was the right one. The Germans had experienced fighting the Soviets in Russia and did not hesitate to let NATO know this; as a result they held differing views on the strategy to be adopted.

Western Germany was influenced by the thought of the powerful mobile Soviet Army, and was determined to build up a large, hard-hitting offensive force capable of meeting it on its own ground. She decided that mobility was essential and, in the effort to prevent Western Germany from becoming a battleground, wanted the means of carrying the fight well into enemy territory. As a result of their experiences, Western German experts were firmly of the opinion that the best fighting formation was one in which tanks were married with infantry, the infantry being carried on wheeled, light-armored personnel carriers (APC's).

NATO strategy was purely one of defense, and the rather pessimistic view was held that the small numbers of NATO troops on the ground might have to give ground in the face of Soviet preponder-

ance. After some argument, NATO strategy was halfheartedly followed, although one Western German school of military thought was that there should be a wide, static, rigid defensive belt along the eastern frontier. Generally, there was uneasiness in Western Germany about the policy of "fluid defense," as it was feared that there was danger of large parts of the country being abandoned to superior Soviet forces in the ebb and flow of battle.

When cuts were introduced in the British forces in April 1957, Adenauer announced that Western Germany must have nuclear capable delivery systems to counterbalance the reduced manpower. Western Germany is bound by the Paris Agreement not to produce atomic, biological, or chemical weapons.

In December 1957 the NATO heads of government agreed in principle to have medium-range rockets placed at the disposal of the Supreme Allied Commander Europe. Adenauer had accepted the policy of nuclear deterrent.

The West German forces now have tactical nuclear weapons delivery vehicles, but not the warheads, which must remain in US custody.

Territorial Defense Command

In November 1957 Major General Hans Joachim von Horn was appointed commander of the Territorial Defense Command. Although the organization had been in existence for some time, the new commander gave it real impetus in the form of greater guidance as to its future organization.

In addition to general responsibility for administration and housekeeping duties for all of the armed forces, one of its missions is home defense. However, it will not be equipped with tanks, nor is it to provide air defense inasmuch as this is a responsibility of the Federal Republic's air force. Home defense forces are to be lightly armed, and of limited mobility.

Equipment

Somewhat to the surprise of the NATO nations, Western Germany doggedly pursued her own line of thought and policy, and refused to be hustled and browbeaten in the matter of equipment.

Convinced that mobility was essential, Western Germany planned to build a mobile army—with approximately 6,000 tanks and 10,800 wheeled APC's which would be able to transport the bulk of the army.

Western Germany was deeply interested in APC's and planned to design one of her own which would be an all-purpose vehicle capable of carrying infantry, and also of being used as a gun platform, an ammunition carrier, or a light-armored fighting vehicle. It was to have a low silhouette and good cross-country performance.

In July 1957 it was planned to manufacture 1,600 APC's mounting 20-mm guns and powered by Rolls-Royce engines. These APC's were to be built in Western Germany, but because of procurement problems and technical difficulties none are being manufactured at the present time. The Defense Ministry now is planning to use *Hispano-Suiza* APC's.

Drawing on her World War II experiences, Western Germany was definite about what type of tank she wanted. The British *Centurion* was rejected as being too expensive, and the American *Walker M47* was not liked as it was regarded as being too slow and too wasteful in fuel. However, 1,000 *M47's* were accepted as a gift and used for training purposes. The United States offered the *M48*—which had smoother sides and was thus less vulnerable—at special rates. Two hundred were handed over to the Bundeswehr in December 1957.

Not overenthusiastic with the American product, Western Germany began to design a tank of her own, which would weigh between 20 and 30 tons and have wide

tracks and a good cross-country performance. It is anticipated that the first of these will be delivered this year.

A number of American vehicles are being used, but again, being independent, Western Germany is not content with them, but is developing and producing her own types. The artillery is mainly American, as is other equipment, although some has been purchased from Italy and other countries.

Since mobility is considered to be of prime importance, Western Germany became interested in the guided antitank missile, and the French *SS-10* was tried out in 1958. It is thought that the Bundeswehr was reasonably satisfied with it, and will adopt either it or the later improved model, the *SS-11*.

The Bundeswehr showed a keen interest in helicopters, and bought some *Sikorsky's* in 1957. Later, other models were bought from both America and France. Troop-carrying aircraft were not overlooked, and the French *Noratlus* aircraft, capable of carrying about 45 fully equipped men, are being built in Western Germany under license. It is expected that perhaps 100 will be in service by 1960.

Formations

Initially, the divisions were about 12,000 strong and consisted of three reinforced battle groups. Each division had its own artillery, antiaircraft units, antitank units, supply and other services, and was based on the then prevailing pattern in Western armies. The main differences were that sometimes the battle groups had more than three battalions, perhaps four or five, and each infantry battalion had six companies, but only three were rifle companies, the others being headquarters, supply, and mortar companies.

Each armored division had about 220 tanks or self-propelled guns. The framework for three corps headquarters was set up.

Three infantry divisions were placed

under NATO command in July 1957, but they were ill-trained and lacked sufficient junior officers and noncommissioned officers. There were about 110,000 of all ranks in the Bundeswehr in October of that year. Good progress was made with the armored divisions. Two were placed under NATO in January 1958, making a total of five Western German divisions. It was further anticipated that an airborne division would join NATO in the spring (1958), and a mountain division in the autumn. Both were, in fact, assigned to NATO in April 1958.

However, the concept of warfare was changing and ponderous divisions fell out of favor in the light of the new nuclear thinking. Western Germany looked at both the American and the British Armies where experiments were being carried out in new formations. One Western German school liked the look of the American pentomic division, while another favored the new, small, self-contained British brigade which had both an organic tank and artillery element.

By June 1958 the Western German Defense Minister had decided upon the new policy to follow in relation to formations, and the British idea of the small, self-contained brigade or combat group of between 3,000 and 4,000 men was to be adopted with certain modifications. It was to contain a tank element, artillery, and a small decontamination unit.

All new formations raised were to be on the new pattern, and the existing divisions were to be reorganized during the next two years. There were to be three brigades or combat groups in each "division," which would be more in the nature of a task force headquarters. Brigades or combat groups would be switched from one division to another as the situation demanded.

Training

From the spring of 1956, military schools of instruction were opened suc-

cursively for the various arms. An armor school was opened at Munsterlager. A school at Koblenz gave political training and psychological warfare schooling. A general staff college was set up in April 1957.

An American team was attached to the Bundeswehr and was available to give help and advice on technical points—especially equipment—but only if asked to do so. The Bundeswehr insisted upon taking its own independent line of thought and was not prepared to follow blindly what other armies had adopted. The Western Germans were heavily influenced by the fighting on the Russian front in World War II, and taught such tactics as they had used there with some success. These did not always coincide with those in use in other NATO armies.

In September 1957 the first exercises were held at Kassel involving about 35,000 men and 350 tanks at combat command or lower level. The men were untrained and the results were disappointing. They showed that there was much to be done in the way of training before the formations were fit to take the field.

The following month a combat group of an infantry division carried out an exercise involving about 3,000 men and 500 vehicles. On this occasion the morale and keenness of the men was a little higher, although the exercise itself was not a success.

In November another exercise was conducted at Kassel which involved about 35,000 men and 250 tanks. This went moderately well. The Bundeswehr seemed to be improving visibly every time it took the field.

In January 1958 there was a short exercise within the NATO framework which was quite successful—a command post exercise of selected staffs of corps and division. During the remainder of the year there were a number of training exercises which showed that the standard

of training and efficiency was improving.

In September and October 1958 the army conducted its first large-scale maneuver, in which about 80,000 men and 15,000 vehicles participated. In it two new type brigade or combat group formations were matched against each other in a nuclear exercise which was successful.

Personnel

While there were ample experienced senior officers from which to choose, there was an acute shortage of junior leaders. The first group of junior officers had been commissioned in November 1956 and were either from the Frontier Police or had seen some war service. Young men of sufficient intelligence and education seemed reluctant to offer their services. Although the shortage was as high as 3,000 for some time, Strauss refused to offer short service commissions to fill the gap.

In January 1957, for instance, when the Bundeswehr was approximately 97,000 strong, there were about 10,000 officers, of whom less than 20 percent were subalterns. Most conscript companies that year were lucky to have two officers, while the companies of volunteers usually had only one; the majority of the platoons were commanded by noncommissioned officers.

In January 1958 it was estimated that at least 3,700 junior officers were required, and a serious effort was made to meet this demand. A commission as a second lieutenant was offered to suitable candidates after 18 months' training, with promotion to lieutenant after two years.

There were three cadet schools which were producing about 700 officers a year at the end of 1958. It was planned to expand the cadet schools eventually and to have a three-year course to prepare candidates for commissions.

The officers of the Bundeswehr led a severe and Spartan life. Their food was taken from the enlisted men's cookhouse. There was no "mess life" as we under-

stand it. They all regarded their vocation strictly as a job to be done.

The officers were "professionals" who continued serving until they reached the age limit—generally of 60 years.

The other ranks are of two classes, the "regulars" and the conscripts. Conscripts have already been mentioned.

The regular soldiers are divided into two categories. One consists of the "professionals" proper who are the senior non-commissioned officers and warrant officers, and who engage for life and retire at the age of 55 years. The other category consists of what we think of "short service regulars," and are conscripts who engage to serve for short periods of service of between three and 12 years. They become either junior noncommissioned officers or technicians.

Discipline and Morale

When the "Volunteer Bill" was passed it included a "complaints procedure" under which every soldier had the right to complain to the Minister for Defense or his representative. For the first year of its existence (1957) the Bundeswehr had no military disciplinary code, and there was little that could be done to enforce orders. The only offenses that could be punished were civil ones, and these had to be taken before the civil courts. The rights of the soldier were jealously guarded by the politicians.

In the early months there was an air of uncertainty as neither officers nor non-commissioned officers knew the limits of obedience they could demand. There was little military formalism such as saluting. Even so, in spite of this hothouse atmosphere, there seemed to be little real difficulty, apart from a few teething troubles, mainly perhaps because most of the men were either volunteers or interested conscripts.

A Commissioner for the Armed Forces was appointed whose job was to investigate complaints made by the troops, and all

had the right to see him. In October the men were able to elect a spokesman per company. All these civic safeguards did not help to cement the Bundeswehr and it was not long before Strauss was openly concerned about the low state of morale.

A disciplinary code was introduced, but it covered only minor military offenses and gave few powers to the officers and noncommissioned officers. However, as the Bundeswehr grew stronger and more confident, a sterner note crept in and discipline hardened, with the result that morale and training improved immensely. In October 1958 we hear of Strauss openly praising the old traditions of service and loyalty.

Air Force

Initially it was announced that the new air force, the Luftwaffe, eventually would consist of about 1,300 aircraft, in 20 wings, and would have a total of about 100,000 personnel. In August 1955 Western German pilots began to attend jet conversion courses. The next year, Lieutenant General Josef Kammhuber—a former night pilot—became the head of the air force, and he stated he hoped it would be ready for action by 1959.

By November 1958 the Luftwaffe possessed about 725 frontline aircraft, and had just over 40,000 trained personnel. These aircraft consisted of Canadian Sabres, Starfighters, and other types of fighter bombers, and reconnaissance and military transport aircraft. Some helicopters also were acquired.

It was planned that nine squadrons would be placed under NATO control by the end of 1958, but this program fell a little behind schedule.

Matador missiles were on order by the end of 1958, and certain officers and men had received training in the use of the Nike and the Honest John.

The Navy

It was agreed initially that the navy would consist of about 20,000 men, would

be used for coastal defense and local amphibious operations, and would possess submarines.

In March 1956 Admiral Friedrich Ruge was appointed head of the naval department. He estimated that the navy would be ready within four years. It was to consist of 18 squadrons of destroyers, corvettes, motor torpedo boats, minesweepers, and landing craft. It was to be supported by a small antiaircraft group, and was to have a few naval aircraft.

In November 1958 the navy had 105 ships and about 17,000 men all of whom were volunteers. By the end of 1958 three flotillas of minesweepers were handed over to NATO.

Liaison

There was some thought against allowing German officers to become staff officers at NATO or to command other NATO troops. However, as the strength of the Bundeswehr grew, it became obvious that Western German officers eventually would occupy positions of major importance. It was the French who suggested that with the immediate prospect of five divisions under NATO, and more to come, that a Western German general should be appointed to command the Central European Land Force under the over-all command of a French general.

In February 1957 General Hans Speidel, a former chief of staff to General Rommel in France, was appointed to this position. Just previously, Western German staff officers had been appointed to NATO, and as liaison officers with other NATO forces. Later on, military attachés were exchanged.

Factors to Be Considered

There are one or two factors that should not be overlooked when considering the Bundeswehr and its potentialities. The first is that Germany is a divided country, and while others may forget this occasionally, she occupies the thoughts of many Germans, first and foremost.

Next, Western Germany is an independent country and her leaders have shown they have a mind of their own. The morale of the people rose with their economic recovery, and is now blossoming.

Another factor is that opposition to re-arming is disappearing. As the opposition fades, the Bundeswehr will swell and thrive, so we can look forward to Western

Germany possessing a formidable force in the near future.

During the past four years the Bundeswehr has established itself firmly, and before long will have placed 12 divisions, or their equivalent in the new brigade or combat groups, at the disposal of NATO; more formations will be raised and great progress can be anticipated.

One of the basic security goals of the Free World is to deter general nuclear war. Deterrence is achieved by convincing an enemy that a war which he might think of starting would end in disaster for him. Moreover, in taking action to instill this conviction in the mind of an enemy, it behooves us to consider the nature of general war as the *enemy* views it and the types of military force which the *enemy* believes would be most effective in such a war. This does not mean that we should ape the enemy in our military preparations for war. It does mean, however, that we must be aware of what impresses the *enemy* in the way of military power if we are to make any reasonable assessment of the deterrent effect our military preparations are likely to exert on him.

If we examine the two Soviet statements in this light, we can readily detect a requirement for at least two distinct types of military forces in the Free World.

One type consists of balanced and secure nuclear retaliatory forces—which are capable of inflicting the 'great damage' on the USSR mentioned by Khrushchev, even after being struck first by an enemy.

The other type consists of modern land, sea, and air forces of such strength, composition, and deployment that they could successfully engage Communist forces in that phase of a war which the Soviets consider would follow a thermonuclear exchange. By maintaining such forces, we can help convince the Soviets that victory—even if they had survived the heavy damage of nuclear warfare—would, in the end, elude them. In other words, the conventional forces of the Free World, along with the retaliatory forces I have mentioned previously, comprise a balanced power to deter, if possible, general nuclear war, but if not, to ensure our survival in such a war. These forces are also essential in meeting Communist aggression short of general nuclear war.

General George H. Decker

ANTIGUERRILLA OPERATIONS

A Case Study From History

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The italicized paragraphs in this article are in consonance with current doctrine as taught at the United States Army Command and General Staff College.—Editor.

THEY were unequalled in endurance and fighting ability. So cunning were the Apaches that a mere handful could keep a community in terror or an army in disorder. What type operations would be required to subdue the Apaches who have been described as the most hardy, warlike people known to history?

What were the qualifications of the Army officer who was to guide this antiguerrilla operation and to subdue Apaches such as "Old Nana" who at the age of 81 led 30 of his Apache warriors on a raid into New Mexico and in a period of less than 60 days traversed over a thousand miles of US territory, fought and won eight separate battles, and successfully evaded a pursuing force of 1,000 soldiers and 400 civilians?

It was General George Crook—a brilliant military strategist, tactician, and leader—who was to subdue and effectively rule the Apache Indians. A description of the officer by one of his contemporaries of the 1870's would read something like this.

"The General was every inch a soldier—always in top physical condition and ready for battle. He was a large man, erect,

spare, and muscular. When considering a plan he listened much and talked little. No soldier or Indian was too low or too poor to gain access to him. He was quiet and unpretentious, but even to a stranger 'there was the power, the force of a man who DOES.'"

Mission

Crook's mission was to tame the Apache Indians and establish them on a reservation. It is apparent immediately that he was to wear two hats—that of a tactical military commander and that of a diplomatic negotiator. He was faced with the job of defeating on their own ground the most outstanding fighting men on the continent of North America, and, at the same time, he was to negotiate a peace with these nomadic people who had for centuries lived by fighting and plundering.

Guerrilla type forces, employing tactics characterized by surprise, rapid movement, deception, secrecy, and stealth, have realized considerable success throughout history. Since World War II, guerrilla warfare and antiguerrilla operations (Greece, Algeria, Malaya, and Indochina) have become the most common forms of overt warfare.

The scope and nature of a commander's antiguerrilla mission may include political and administrative aspects seldom encountered in normal operations. The methods and techniques of combat in which

General Crook was a brilliant military strategist, tactician, and leader. His antiguerrilla methods could be modified to utilize current materiel with equally effective results against any present-day guerrilla force

commanders have been trained may have to be modified or even disregarded.

Intelligence

Crook arrived in Tucson, Arizona, in the summer of 1871 unheralded and unknown, but already an experienced Indian fighter. He immediately interviewed everyone who could contribute in any part to building up his information concerning the area of operation, the Apaches, and the over-all situation in the southwestern United States. He talked and listened to a multitude of people representing all walks of life—privates and colonels, mule skinnners and bankers, as well as the Governor.

Before making any plans concerning the conduct of the campaign he was to wage, Crook made absolutely sure that he had explored all sources to gain information concerning the situation—his intelligence estimate was thorough and complete.

To conduct *antiguerrilla* operations without sound intelligence and counter-intelligence, wastes time, material, and troop effort. However, the intangible aspects of guerrilla warfare create intelligence obstacles that can be overcome only by patient determination and the utmost resourcefulness.

Plans for *antiguerrilla* operations are based primarily on a detailed analysis of the country concerned and its population. The political, administrative, economic, sociological, and military aspects of the plans are correlated closely with the over-all military plan.

Lieutenant Colonel Donald V. Rattan was graduated from the United States Military Academy in 1945. During 1952-53 he served with the 7th Infantry Division in Korea. Other assignments include duty with the 11th and the 82d Airborne Divisions and with the Airborne Aviation Department of the US Army Infantry School. Following completion of the Regular Course of the U. S. Army Command and General Staff College in 1957, he was assigned to the faculty.

Preparation

Crook knew that the type of warfare in which he was about to engage would be anything but normal and that his training and orientation program would have to ensure that his organization, as well as the mental and physical conditioning of his men, would permit him to cope with such a foe as the Apache. Demands of significant proportions would have to be placed on the officers and men of Crook's command. Crook knew that in order for the men to "pay the price" willingly, his leadership must be strong, and the men of his command must know him, trust him, and have faith in him.

By mid-July Crook was on the march at the head of his command. His general objective was not to do battle, but to shake down his command and, more specifically, to conduct a study of the terrain, to condition his men, and to create *esprit de corps*. The route that he selected for the march was through enemy territory and included some of the most rugged terrain in the southwestern United States. When Crook had completed his 700-mile training march he knew his command well and the command had come to know and respect its new leader.

An intimate knowledge of the terrain is necessary. Only when the *antiguerrilla* forces' knowledge of the terrain begins to approach that of the guerrillas can they meet the guerrillas on anything like equal terms. Commanders and troops need time to become acquainted with the detailed topography of the area, the civilian population, and the organization and operations of the hostile guerrilla forces. Time is required to impart this knowledge to new commanders, staffs, and troops.

Morale of forces engaged in *antiguerrilla* warfare presents problems quite different from those encountered in normal combat. Operating against an elusive, violent, destructive force that seldom offers a target, that disintegrates before opposition, and then reforms and strikes again



is quite different from operating against the more tangible forces encountered in normal combat.

Conduct of Operations

Crook recognized that the key to the effective conquest of the Apaches would be his ability to maintain a strong and continuous pursuit of the hostiles. To do this he would need men capable of combating the Apache in his own element, and a transportation system far better than any that existed at the time. He organized a transportation system that was unequalled in his day. He became known as the daddy of the American mule; his men were fond of saying that he was "pack-mule wise." Drawing on his knowledge gained from studies of the highly organized transportation systems of Spain, Peru, Mexico, and the mining systems of the southwest, he developed and maintained a pack train system that was equal to the task of wearing down the Apaches. Crook spent much of his time in close observation of the pack trains and gained even more knowledge of the trains and the mule skinnners by talking frequently to the men around the campfires and observing the trains in operation.

Constant pressure must be maintained against the guerrillas by continuous operations and vigorous combat patrolling until they are brought to decisive battle. This keeps the guerrillas on the move, disrupts their security and organization, separates them from their bases of supply, weakens them physically, destroys their morale, and denies them the opportunity to conduct operations. Once contact is made, it must be maintained until the guerrillas are brought to battle and destroyed.

A superior mobility differential is essential in antiguerrilla operations. Consideration is given to the type and size of units employed; the selection, training, and equipping of individuals and units; communications; and administration.

These variable factors are then considered in relation to the hostile guerrilla forces, the mission of the various command echelons, and the topography, weather, and climatic conditions. A commander develops the desired mobility through initiative, improvisation, and aggressiveness, as well as by choice of transportation.

The most effective means of destroying the hostile guerrilla force is to conduct a continuous, aggressive offense.

Use of Native Troops

Crook realized that no American soldier would be able to compete with the Apache warriors on a man-to-man basis in the field of endurance. The Apaches had been trained since childhood to go for days with little or no food or water and to march 50 to 75 miles a day on foot. Recognizing the problem, Crook recruited scouts on a scale never before employed in order that he would have fighting troops with the necessary individual endurance and "know how" to fight the Indians on their own terms. Navahos, Pimas, and friendly Apaches were hired on such a scale that Crook was able to put numerous forces in the field each of which had sufficient Indian scouts to maintain direct pressure on the ever-moving hostile Apaches.

Whenever possible, Allied troops native to the area should be employed against hostile resistance elements. Their familiarity with the country, people, language, and customs makes them invaluable.

When feasible, special antiguerrilla units are organized, equipped, and trained to combat guerrilla forces by using guerrilla methods. They are an effective means of carrying on offensive action with relatively small forces. Under many conditions, they are more effective than larger conventional troop units. The chief value of these units is not their numerical strength, but the abilities of the commander and the individuals to develop special skills and teamwork. The effectiveness of a special antiguerrilla unit increases

as it becomes thoroughly familiar with the terrain and the habits of the hostile guerrillas and the supporting populace.

Civil Affairs—Diplomacy

While engaged in his preparations for the military campaign Crook did not forget to don his diplomatic cap. He talked personally to every Apache Indian who would meet with him. He explained to them exactly what was expected of them and told them what their life on an Indian reservation would be like. He explained the advantages that would accrue to them if they accepted the reservation life. He also told them the alternative if they would not move peacefully to a reservation—that he would hunt them down and kill them. Crook made no false promises and his words were so sincere and impressive that there is little doubt that every soldier and Apache in the area knew exactly what the situation was. This policy of keeping everyone concerned informed and of speaking nothing but the bare, cold facts was to have a decided bearing on Crook's military campaign against the Apaches.

Campaign objectives, together with the measures governing political, economic, and social functions, should be publicized clearly. Information and propaganda stress that the people's cooperation and acceptance of the announced policies will determine the amount of assistance and freedom of action given them. If offered, amnesty terms are widely publicized and scrupulously observed.

The Campaign

By the fall of 1872 it was evident that many of the Apaches were not going to accept reservation life peacefully. Raiding, plundering, and killing were continuing on a large scale. By this time Crook was ready to accomplish his mission; his forces were trained and organized—they knew what had to be done and how to do it.

In November 1872 Crook's well-prepared forces took to the field to chase down the renegade Indians. Crook's orders to his separate commands were simple but complete. Each of his commands was to find and fight the renegades wherever possible until the Indians either submitted or were destroyed. The renegades were to be kept on the move constantly, and Crook told his commands that if their horses died, they were to pursue the Indians on foot. They were to maintain relentless, never-ending pressure. The mule pack train system, coupled with the friendly Indian scouts, gave Crook a means to maintain this pressure, and he demanded that it be maintained at all times. By the end of the winter the relentless and effective pursuit had accomplished its purpose and most of the renegades were willing to submit.

The campaign was a success. Crook's policies had paid off. He had "tamed" the Apaches who represented one of the most destructive guerrilla forces the world had ever known.

Conclusion

The foregoing italicized paragraphs are excerpts from instructional material currently presented at the United States Army Command and General Staff College. Disregarding the time element with regard to General Crook's operations against the Apaches, one might easily conclude that he had attended one of the recent courses at the College. More likely, the College doctrine was developed based on experience of men such as General Crook.

The current USA CGSC antiguerrilla doctrine and the methods used by General Crook are virtually identical. If these methods worked against such a foe as the Apache, they will work as well against any known present-day guerrilla force. Remember how General Crook did it: modify tactics to fit current materiel and results should be equally effective.

BOLÍVAR AND BOYACÁ

Dr. Cornelius C. Smith, Jr.
Historian, 15th Air Force, Strategic Air Command

AMONG the many outstanding figures in South American history, one occupies a position of unique prominence—Simón Bolívar, *El Libertador*. The national hero of five Republics, this warrior-statesman and great leader of men is held in special reverence throughout Latin America. This brief discussion listing some of the obstacles he faced in liberating New Granada is indicative of the hardships which confronted him and his patriot army in the long struggle for independence.

His dedication to the cause of liberty was genuine and deep-seated, nurtured by his mentor Simón Rodríguez, and stirred by the writings of Rousseau, Montesquieu, Spinoza, and others dedicated to the principle of human liberty. He had seen enough in Caracas to revolt even the most hardened observer.

Some have deplored Bolívar's "War to the Death" decree issued at Trujillo on 15 June 1813, as unworthy of him. Henry Clay upheld the decree in a speech before Congress in 1818. Many of Clay's contemporaries shared his views. Whatever assessment one may wish to place upon Bolívar's motives in this regard, it is certain that he had adequate cause for drastic action. Upon capture, his soldiers had been made to suffer grievous punishment before death.

By the time Bolívar was ready for his assault upon New Granada, he was a seasoned veteran of jungle and mountain warfare. Behind him were the skirmishes

at Taguanes, Valencia, and Puerto Cabello, and a triumphant entry into a Caracas delirious with joy at his feats. His first campaigns had taken him through the impossible back country of Venezuela where he had destroyed several Spanish armies to serve notice that the liberation of all South America was his goal. This discussion deals only with the approach march to New Granada from the provisional patriot capital in Angostura, and with the Battle of Boyacá—Bolívar's first major victory against the royalist army.

On 15 February 1819 the patriot Congress convened at Angostura, a town on the Orinoco River. Bolívar delivered the opening address, denouncing the theory of dictatorship and calling for the establishment of a united, peaceful, and free republic. The Congress elected him president, and named Francisco Zea as his deputy. With this step accomplished he was free to turn his attention to the business of evicting the armies of Spain from the New World. He lost no time.

Two weeks after the Congress had named him president, he started west with his army, leaving Zea in charge of the government. Although he had announced his plans dramatically at a formal dinner a few nights earlier, they were not really understood by his audience. He had astounded his guests by saying that in his drive to expel the royalists he would march "from the Atlantic to the Pacific, and from Panama to Cape Horn." It was an orator-

A first-class tactician, Bolívar anticipated his opponent's moves and adhered to the basic tactical principles of a good commander—concentration of forces, emphasis on attack, and adequate security measures

ical flourish, and was received as such. That he might put a literal interpretation upon his words was unthinkable. The swamps, the rivers, the jungles, and the towering crags of the Andes—cross these? Never!

Long Trek Begins

The army moved out on 27 February 1819. Since there were insufficient boats for use on the river, he moved his men on foot on its south bank. There was no road, and the caravan plunged through a cloying and tangled mass of rank vegetation. Where the Orinoco joins with the Arauca, the column crossed the river again, using crude rafts for the men and equipment and swimming the horses across. From that point they continued in a westerly direction, meeting with José Antonio Páez near Achaguas. In less than three weeks Bolívar had led his army through 280 miles of some of the worst country on the continent.

On 23 May, at the little village of Sententa, Bolívar held a council for his officers in a rude thatched hut. The rains had started—for which he had waited. No enemy would give second thought to the possibility that an adversary would traverse the South American jungle in the rainy season. Seated on the skulls of oxen, or crouched upon the muddy floor, the officers listened. It was then that Bolívar announced his intentions of continuing west-

ward through the jungles, across the plains, and over the Andes to liberate New Granada. The group was thunderstruck. No one spoke. He encouraged questions then, and a few men asked them. Although the task loomed gigantic, his defense of it seemed irrefutable, and finally the Irishman Rooke said, "Sire, I will follow you even to Cape Horn." When the others had agreed, Bolívar swore them to secrecy. It was not time yet to tell the men.

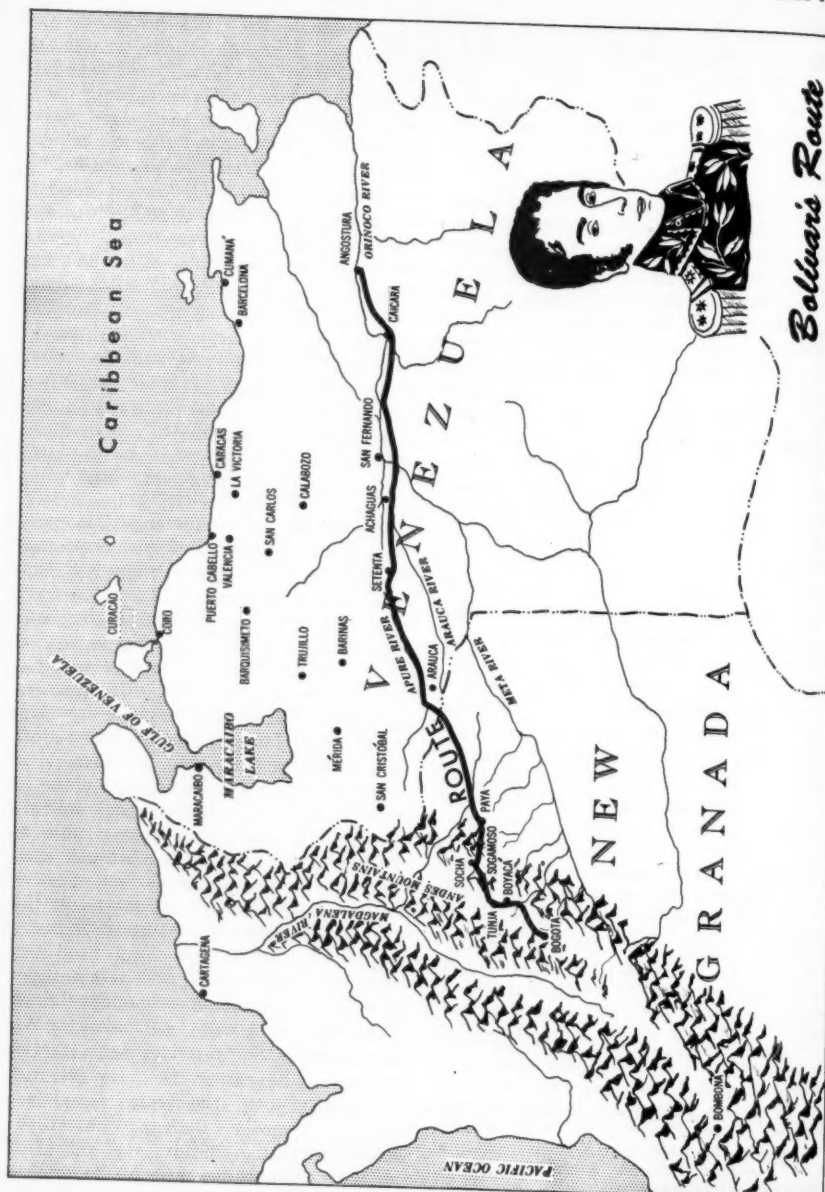
At this point he had about 1,600 foot soldiers and 800 cavalry troops. Several hundred wives and camp followers were on hand as well. On 26 May the column embarked in canoes and rafts and started upstream. They poled and paddled for a week before abandoning the watercourse.

Plains of Casanare

Before them lay the plains of Casanare, an endless stretch of flooded savanna, crisscrossed with rising streams, and bordered with lush green jungle. The rain hammered down upon the straggling column endlessly. The world was a sodden mire, the flooded scene broken only by little islands of saw grass, with alligators sliding quietly down the banks into the water. The soldiers held their rifles aloft as they waded chest-deep in water. Mud sucked at aching feet and leeches clung to bodies in clusters. Cattle and pack animals foundered in the slime, many unable to rise under any stimulus. At night, men and animals alike sought the comparative safety and comfort of high ground on the little islands. There was no firewood, hence no fires for warmth or cooking. Food was eaten raw—beans, beef, and a few soggy remnants of bread, long stale and tasteless.

Clothing rotted and fell away. Open sores festered. Vicious river fish attacked the waders, lacerating the lower extremities cruelly. Still the train moved on, dazedly, doggedly. Bolívar was everywhere; entreating, encouraging, and helping. It took the column three weeks to cross

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the plains. Many of the men and women simply slid down into the swamp never to be seen again. As the army crawled out of the morass, men looked up at the great towering crags of the Andes looming ahead. The jungle soldiers and the *llaneros* (plainmen) had never seen mountains like these. It was an awe-inspiring sight for them.

Bolívar called a halt to rest for the assault on the peaks. Some of the men still did not believe he seriously considered the ascent. However, he had made up his mind, long ago, and the tired column began to scale the mountain. At first the way was easy, much more comfortable than the frightful bog so recently crossed. Soon the trails grew steeper, however, and men and horses began to slide and fall backward on the hard flinty pebbles underfoot. By the time the army had climbed to Paya, all the horses were gone. A few cattle and a few pack-mules remained.

To make things worse, Bolívar purposely chose the steepest and most inaccessible passes. This he did to confound the enemy, one of whose strong patrols might intercept and defeat him on a regular path. From Paya, Bolívar began a trek which has few, if any, peers in military history. He had crossed the Andes before, but with younger men in fit condition. Now he had with him an emaciated group of men and women—starved, fever-ridden, bone-tired, and as lowlanders unaccustomed to the rigors of mountain scaling.

Difficulties Increase

The train struggled upward. Men and women fell repeatedly, cutting their hands and knees. Cascades of loose shale plummeted upon the tag end of the column, kicked free by the leaders up front. Icy rains whipped the train. Cold white mists enveloped it, and finally snow and cold combined to freeze many of the hapless ones. The air grew thin. Lungs ached for oxygen where little of it existed. The dread *soroche* (altitude sickness) came to many

who fell exhausted upon the rocks gasping for air.

As the train climbed above the timberline, the winds assumed gale like ferocity blowing many of the group over precipices. Looking back, all that could be seen was a vast ocean of white mist; looking ahead, only peaks lost in mist.

They climbed for six days. At 13,000 feet all the cattle and mules were gone. They now were on the *Páramo de Pisba*, the highest portion of the climb and the worst place of all. The wind shrieked. The snow whipped them in icy gusts. Many lay down to die in utter hopelessness and desperation. *Páramo de Pisba*, testing place of heroes and of greatness, from that point on it was all downhill. Within a few days the ragged group stumbled into the high green valley of the *Sogamoso*.

Forces Weakened

Bolívar had crossed the Andes. Of the more than 3,000 who had started the climb at Paya, scarcely one-third walked and stumbled into the little village of Socha. The army had marched 750 miles from Angostura to this little wind-swept mountain town, and the trek had been accomplished in less than four months' time. The intrepid band still had to lock horns with an army of Spanish veterans who had fought against Napoleon under Wellington in Spain.

But Bolívar's scarecrow army was not to be allowed the luxury of rest. In Socha he learned that Barreiro was positioning several thousand crack troops across his path to Bogotá. He must strike fast now to upset the Spaniard's plans, and so he decided to attack. The spirit, as always, was stronger than the flesh. He had nothing but barefooted, horseless men with which to attack. After the epic crossing of the cordillera this was a puny obstacle; he sent Colonel Lara on a foraging expedition for food and horses. Within a few days the colonel came back into camp with food, over 1,000 horses, and almost as many

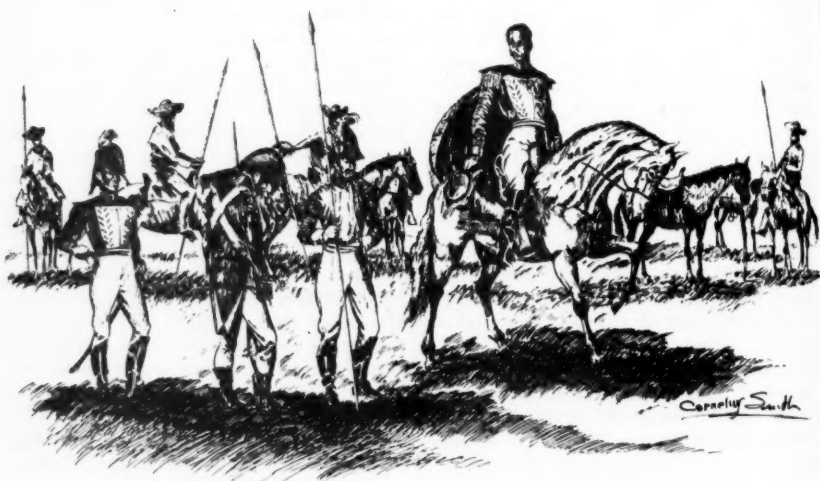
fresh volunteers recruited from villages in the countryside.

First Skirmish

Bolívar reformed his cavalry, trained his new men for three precious days, and set out after Barreiro. The time spent in regrouping could have put Bolívar in a nasty tactical position. As it was, Barreiro dallied, and so lost the precious opportunity for delivering the fatal blow. When he finally marched out from Tunja into

crossed the Gameza and took up a strong hill position on the other side.

Bolívar did not pause, but sent four battalions of infantry crashing into the strongpoint. Many of his men were picked off in the river crossing; more were met with withering fusillades of fire when climbing the hill. So determined was the attack, however, and so swift the momentum, that the defenders were forced to vacate and fall back. For the first time Bolívar used his foreign legionnaires, and



the Sogamoso valley, Bolívar's cavalry was already on the way to intercept him. The first skirmish ended in a victory for the patriots. The fight was insignificant in numbers of casualties, but tremendous as a morale builder for the weary emaciated troops.

On learning the news, Barreiro came up with his main force, marching to the Río Gameza which he crossed. Bolívar effected a union with Santander and Anzoátegui, and the three columns advanced rapidly to the river. Seeing the nature and composition of his enemy, Barreiro re-

was delighted at their vigor in pressing the attack.

The patriots threw successive charges at the new Spanish positions for almost a full day, but could not dislodge them. Admitting the futility of further frontal assaults, Bolívar withdrew his forces to Tasco where he joined with his rear guard under Soublette. The move was not a retreat so much as a tactical maneuver. Barreiro's position was firm, and the patriots, still depleted from crossing the Andes, needed rest.

In Tasco the troops were met with wild

acclaim. Herds of cattle were rounded up and slaughtered for a feast; hospitals were set up for the wounded; and for the first time in months the soldiers could stretch out full length and nourish their bodies with blessed rest.

Battle Resumed

Soon, however, the battle was joined again, and for a week the two armies played for position in the hills. Bolívar made a number of feints to pull his adversary into battle, but none of these had the desired effect.

Finally, on the morning of 25 July 1819, Bolívar had enough of skirmishing and began a march southward on the road for Tunja. Barreiro countered with an oblique movement which placed him between Tunja and the patriots at Paso La Balsa, a narrow place where the road crossed the Sogamoso. For the patriots this was an evil stroke; it squeezed them onto a narrow road with a steep hill on the left and a broad swamp on the right. Barreiro's army, dug in on the hill, now commanded the road and the swamp.

Santander was ordered to take up a position on a rock knoll facing the high hill. He was given no opportunity to carry out his orders. Barreiro, from his superior position with an excellent field of fire, cut down Santander's men inflicting heavy losses. This was not all with which Bolívar had to contend. Even as the fight progressed, swift Spanish couriers were racing back to Bogotá for reinforcements. Time was the worst rival now. The spirited chief had to attack.

British Legion

Because of Santander's losses, Bolívar threw the British Legion into the center on a frontal assault, and Carvajal through the swamp on the right flank. The English, Irish, and Scotch legionnaires charged the hill in the face of withering fire. O'Leary fell, and then Rooke. Mackintosh, pressing the attack, finally led the bayonet charges which carried the heights.

The battle was not finished. Fresh Spanish troops had arrived upon the scene, and Barreiro launched a vigorous counterattack upon the British Legion, while simultaneously hitting Soubllette's rear guard on the main road. Bolívar was now encircled completely. He had one card left in the deck, and he played it. Colonel Rondón was nearby in reserve with a squadron of *llaneros*. Without flourish, Bolívar gave him the order, "Colonel, save your country." Rondón wheeled on his mount, and led his men careening off into the teeth of the Spanish cavalry holding the pass. So swift and relentless was this surprise move that the defenders were swept away.

Royalists Withdraw

Pressing his opportunity, Bolívar threw his infantry in behind the *llaneros* and fanned out the foot troops to hit the enemy's rear on both flanks. As the Spaniards staggered back night fell, and with darkness came a fearsome storm drenching the bloody field with torrents of rain. The cover of the storm saved the remnants of the Spanish army. As it was, more than 500 royalist soldiers lay dead upon the sodden field.

In his report to the Crown on the action at Pantano de Vargas, Barreiro said:

The destruction of the rebel army seemed inevitable and should have been so complete that not a single one should have escaped death. Desperation inspired in them resolution without parallel. Their infantry and cavalry, surging from those chasms in which they were trapped, hurled themselves against the heights with fury. Our infantry, confused by their excessive ardor . . . could not resist their force.

This does not seem to be an excuse so much as it does a mere statement of fact, and it reflects to the credit of the defeated commander in issuing so honest an assessment. From the depths of despair, Bolívar and his ragged followers had come to the surface shining with glory.



Once again Bolívar found himself in critical need of men and supplies. This battle had exhausted both. He could ill afford to count upon a second instance of Spanish dalliance, but that is exactly what happened. Although a brave and respected commander, Barreiro seems to have suffered somewhat of a psychological defeat at the hands of Bolívar. The main body of

who came straggling in. The camp at Tunja was austere. The city lay in the trough of an altiplano crisscrossed with steep hills and gullies. It was a cold, gray, somber place, with its silent people enshrouded in ponchos. Eternal mists hung about the valley, and over the city towered the Andes, bleak, snowcapped, and forbidding. But from Tunja south the plateau



royalists was still intact in New Granada, and these troops would have to be reckoned with before the campaign could end. Yet Barreiro decided to fall back upon Bogotá, thus giving his skillful adversary more of that precious commodity, time.

Bolívar used the time to fill his ranks. He decreed martial law in the territory he occupied and ordered all able-bodied men to join his ranks and to bring their horses with them. He broke up his battalions into cadres to train the peasants

fell away toward Bogotá, and that was the direction in which he was headed.

Bolívar's scouts came in with the news that Barreiro was approximately 10 miles away from the city on the way to Bogotá. Bolívar assembled his army in the city square and told them of the battle to come. In all, there were about 3,000 men to listen to his words. Shortly thereafter the army moved off to the scene of battle.

Barreiro was upon the field, a bowl like valley with a stream flowing through its

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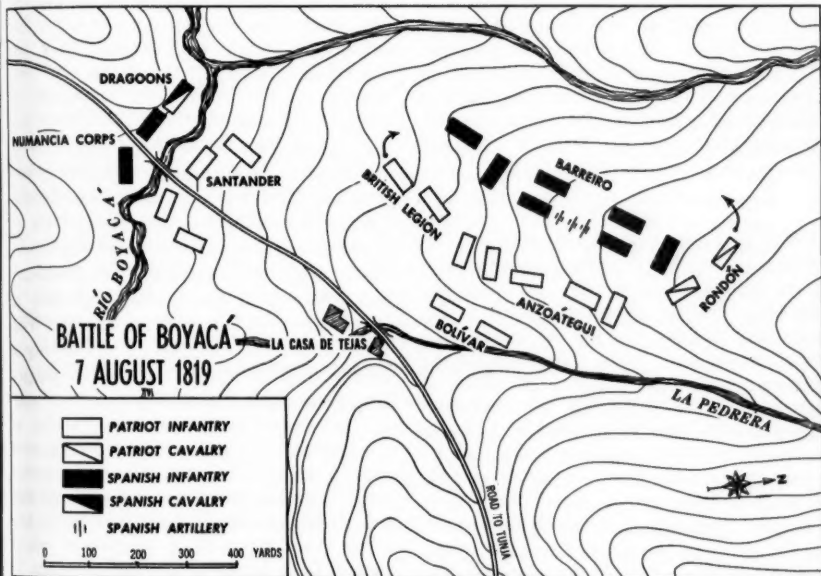
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center. Bolívar scouted his enemy's position personally, and issued an order for his troops to march on the double in close order with Santander ahead and Anzoátegui in the rear. Barreiro saw some patriot cavalry on high ground to the east and erroneously took it for Bolívar's main body. Compounding his poor judgment, he failed to reconnoiter further and permitted his column to remain strung out, the advance echelon well in front, the artillery

fire quickly, permitting the dragoons to remount. Reinforced by the British Legion, Santander was able to force the Spaniards from their knoll, and the latter fled to the bridge to hold at that point.

The Río Boyacá was in most seasons no more than a peaceful brook meandering through the tortuous maze of hills. Swollen by recent rains, it was now a raging torrent of dirty brown water, surging and charging at the banks with boiling feroc-



to the rear. Worst of all, he called for a rest halt within a short distance of his objective—the bridge over the river Boyacá. Separated from his advance guard by more than half a mile, he rested while Bolívar, only a few hundred yards away, raced into position on a parallel road.

The Spanish vanguard was composed of one squadron of dragoons and two battalions of the Numancia corps. It was resting near the bridge when Santander's squadron fell upon it seemingly out of nowhere. The Second Numancia Battalion opened

ity. Its banks were thick with brush. The bridge at the pass was narrow, and the surrounding hills rose precipitously. It was a good place to hold. The Spanish advance guard crossed the bridge and took up positions along the river's south bank. Santander took up similar positions on the other side of the river and began to throw frontal assaults at the bridge.

Bolívar formed his main columns in company front formations and advanced upon Barreiro. The British Legion, in contact with Santander's forces, made a flank-

ing movement across the road. This turned the Spanish battalions, driving a wedge between them and making it impossible for Barreiro to gain contact with his beleaguered advance party. Colonel Rondón, the hero of the Pantano de Vargas encounter, made a flanking movement from the rear, thus herding the entire Spanish army into a crescent of entrapment. The crescent soon assumed the proportions of a circle, with the Spanish in the center. As a last resort, Barreiro placed his artillery on a ridge near the center of the circle and flailed away with shot and shell. Thus there were two battles going on simultaneously; Bolívar hammering away at Barreiro caught in the vice, and Santander trading blows with the Numancia Battalion and the dragoons at the bridge.

Victory

Within a couple of hours it was all over. Anzoátegui forced the Spanish center with a furious bayonet charge, silencing the smoking artillery pieces. The British Legion and Rondón met on the banks of a small creek and closed the circle on the Spaniards. Bolívar threw a battalion of lancers at the remnants of Barreiro's army and the battle was finished. Barreiro dropped his sword upon the ground and surrendered to a private of the First Rifle Battalion. None of the men in the circle escaped. Approximately 40 or 50 outside it did get away, fleeing to Bogotá with the terrifying news. Their accounts of the battle so frightened Sámano, the Spanish Viceroy, that he fled in disorder leaving behind half a million pesos of the royal treasury.

The patriot losses were small and have been placed at 13 dead and 53 wounded. On the royalist side, about 500 were killed, 1,600 wounded, and the remainder, except the handful who escaped to Bogotá, were taken prisoner.

The Battle of Boyacá was Bolívar's first decisive victory. It marked him as a first-class military tactician, an accolade he

would win and deserve again before he had completed his great task of liberating a people. In this battle he made no errors. Instead, he anticipated his opponent's moves, and on more than one occasion tricked him into doing things he ordinarily would not do. Moreover, these were not rash acts of bravado on Bolívar's part. In every situation, regardless of his enemy's blindness, he adhered to the basic tactical principles of a good commander—concentration of forces, emphasis on attack, and the observation of security measures. The battle was fought on 7 August 1819. Immediately following the fight, the conqueror set out with three squadrons of cavalry for Bogotá. He entered the Capital City of New Granada three days later.

Not until another five years had passed would Bolívar see his people free of bondage. After Boyacá came the Battle of Carabobo and the liberation of Venezuela. Then came the campaigns of Bomboná, and Junín, and finally the liberation of Peru with the battle at Ayacucho. With Boyacá, Bolívar was well along the way to immortality. At the end of his campaigns, and even during them, he received such adulation as has seldom been the lot of mortal man to encounter. Flowers were strewn along his path, triumphal arches erected, and a grateful people offered him a kingship for the taking. Yet he turned away from this with a gesture of impatience. In a letter to his old comrade in arms Páez, he wrote:

Colombia is not France, nor I, Napoleon. The title of Liberator is superior to every other one that human pride has conceived. It is unthinkable that I should degrade it.

Conclusion

Like other great men who have scaled the heights, his latter days were filled with sorrow. Once freedom was won, its heirs began to squabble among themselves, and the land was torn with dissensions. Even his old comrades in arms turned upon him,

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Arismendi going so far as to declare him to be the "tyrant of Colombia, an ungrateful son of Caracas, a creature of evil purposes." His health had begun to fail, and as the days passed he became weaker, until at last he could scarcely stand. Hounded out of his own land, he took ship for Jamaica, but in his emaciated condition could not stand the sea voyage. The frigate put back into port, the small seacoast village of Santa Marta. Racked with fever, he lingered for a few days, and then passed

away quietly on 17 December 1830. He was 47 years old.

Twelve years later, to the day, his body was carried in great state to the city of his birth. Flags hung at half-mast, cannons boomed, and the great procession marched along to the slow roll of drums. The catafalque, drawn by black horses, was covered with black silk and huge floral wreaths and garlands. Restless in life, the liberator had come home to his people to rest in honored glory.

The world-wide commitments of the United States Army make it mandatory for young officers . . . to have an understanding of a variety of problems peculiar to such deployments, such as language and cultural problems. The impact of technology will also be interesting, complex, and challenging. The successful officer of tomorrow will be the individual whose vision, education, and training equip him for varied tasks in a diversified army. But foremost, an officer must be a leader, well-versed in the art of leadership. No other attainment will equal in importance or in complexity his task of leading the Army's most valuable asset—the individual soldier. His morale and that of your unit will be no better than you make it.

I can assure you that man is and will remain the most essential element in any future conflict. Man, not machines, win or lose battles and the importance of the individual increases with each technological advance in weapons and equipment. Remember these words: 'The most marvelous weapon that technology can produce is just a tool in the hands of man. Upon his human skill and determination to use his tools all else in war depends.'

* * * * *

Remember this: Acquiring the art of leadership is simply a matter of mastering certain techniques and building up those sterling qualities that give effective expression to your natural talents. The average man is a good potential leader provided he is willing to work at being one.

Lieutenant General Arthur G. Trudeau

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MOBILITY IS WHAT YOU MAKE IT

Lieutenant Colonel Daniel A. Raymond, Corps of Engineers
United States Army Engineer District, Okinawa



SEVERAL times this year United States tactical forces will undergo field exercises requiring considerable movement. The forces involved will include units highly touted for their mobility. Yet an observer may question this mobility, for there probably will be in evidence the familiar road congestion, movement bottlenecks, and the limited off-road capabilities long associated with prepenomic forces. The fact also will be apparent that mud, swollen streams, and defiles do exist and still are formidable obstacles to movement. The observer may well question whether we are deluding ourselves in this matter about mobility. The answer depends on what is meant by mobility.

Mobility certainly is one of the most overworked words in today's military vocabulary and no discussion of strategy,

tactics, or doctrine in the nuclear era is complete without it. Everyone agrees as to its essentiality in any war, and in many military circles it is acclaimed as the panacea for many of the difficulties foreseen on future battlefields. Yet mobility is an enigma. No two people will define it in the same terms, nor agree as to its place in future war, and some will even disagree as to its existence. Webster says it is a state of being mobile and, in turn, indicates that anything mobile is characterized by extreme fluidity, is readily movable, and can respond quickly to any stimulus.

Some tend to define it in terms of materiel; others simplify it to mean the ability to go from one place to another quickly by whatever means will suffice. Some contend that mobility is a matter of trafficability in terms of ease of movement over

Strategic and tactical concepts must be based on the exploitation of mobility which is intended to disrupt and deny the continuity of the enemy rear and facilitate the destruction and defeat of enemy forces

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terrain. A good case can be made that mobility is a state of mind that depends primarily on the will for achievement, and can be attained by foot movement alone, as Jackson did in the Shenandoah Valley. All will agree that mobility is relative.

Regardless of how it is defined, mobility is no recent addition to military parlance, for it has played a significant role throughout military history. In more recent times Hitler's Panzers, the British Eighth Army in Africa, and the United States forces in World War II were at times characterized by a high degree of mobility. These well-known instances are associated firmly with success in battle. However, there are examples of apparently mobile forces opposed to relatively immobile forces which did not attain success in full proportion to their apparent mobility.

Mobility Redefined

It may be that true mobility is found not in materiel, not in ideal terrain, not in favorable weather, nor even all of these together—but that mobility is achieved through purpose.

It is apparent that mobility can serve many purposes, each an end to be achieved. Without a clearly understood purpose and application of means toward that purpose, however, the advantage of a mobility capability is not realized. A force with apparent inferior mobility means, with these means applied to a proper pur-

pose, can achieve superiority over another force with better means not properly applied. Examining briefly just a few of the major purposes of mobility and their roles in military operations will illustrate.

Strategic mobility has as its purpose the rapid movement of significant forces in a minimum of time to any trouble spot. The advantages achieved through this purpose are obvious: economy of force, the deterrent effect derived from the capability of rapid intervention, the morale effect on allies who know they can be supported rapidly, the capability to forestall trouble or prevent its enlargement, and the ability to enter combat quickly and forcefully. Strategic mobility is achieved through ready forces, adequate sea and airlift or ground transportation, transportable materiel, and adequate plans. However, strategic mobility generally is only a means of moving to a scene of action and is no guarantee of results to be achieved once on the scene.

Supply mobility, the logistician's dream, has as its purpose the support of forces by a supply system that is flexible, fast moving, readily adaptable, and quickly responsive to changing conditions. Its principal features include: reduced reliance on fixed bases, lesser resources in the pipeline, fewer echelons of back-up support, and more freedom of movement for operational forces. Achievement of supply mobility is sought through such means as electronic data processing, reduction in numbers of items required, rapid means of transport, lower standards of maintenance, and reduced bulk of items. Logistical mobility, however, again is only a means to an end and can only contribute toward success.

Communications mobility has as its purpose the rapid transmission of information under any circumstances to enable and facilitate command, control, and administration. It is achieved through equipment that is light, compact, reliable, long ranging, and powerful; by a high degree of

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training of communication and using personnel; by simplicity of operations; by reliance on electronic systems; and by the capability for rapid displacement of system components.

Similarly, each component element of the military operational system—whether it is logistical, tactical, or administrative—has an element of mobility which can be isolated as to purpose and means of achievement. These mobility elements add up to a force which has a high mobility potential. All these elements are essential, but only facilitate operations and are not decisive in themselves.

Critical Category

The payoff category of mobility is *combat mobility* which has application in both the strategic and tactical spheres of operations. Its purpose is to *disrupt and then deny continuity of the enemy rear as a means to accomplish the rapid destruction and defeat of the enemy forces*. Briefly stated, it is Disrupt, Deny, and Destroy. This is the key to victory in combat through mobility, in either the strategic or tactical spheres. It explains the contradictions between apparent mobility in terms of means, and the apparent lack of mobility when such means are exploited improperly or inadequately. It places in proper perspective the various means of achieving mobility, and it sheds light on the apparent enigma of forces limited to foot movement and transport being able to defeat forces obviously superior in mobility means.

To appreciate this purpose it is necessary to examine the term "continuity of the rear." Any significant military force engaged for an appreciable period of time has a rear in the sense that it requires a source of support and access to this source. The depth of the rear will vary significantly with the echelon of the force. In any case this rear includes support activities—whether they are logistical, administrative, or tactical—and access be-

tween these activities and the supported forces. Access may be by ground links, sealanes, air lanes, or any combination thereof.

Even in a discontinuous zone of contact these lanes or links must exist and be utilized. Collectively, the support activities and links provide for sustenance, direction, control, administration, command, reinforcement, and maneuver of the operating forces, and are indispensable. They constitute interdependent parts of the whole that is the military machine in operation. (The Soviets recognize and emphasize the importance of the concept of the continuity of the rear in their permanently operating factor, "stability of the rear.")

It is toward the achievement of initial disruption and continuing denial of this continuity of the rear that mobility must be directed in order to achieve maximum results. When disruption and denial are achieved, the enemy is without the support, sustenance, assistance, and other means to withstand for long either defeat or destruction. Only in terms of this purpose does combat mobility have a real meaning. Without this meaning the combat mobility may be unrealized, and the means thereto can become a hindrance. It is the lack of disruption of the rear that may result in the prolonged static situation and waste of forces in the familiar grinding combat of attrition in head-on contact.

Historical Examples

There are repeated historical examples of this concept of mobility. The Japanese experience in the Philippines in 1941-42 is an example at the strategic level. The continuity of the US rear was disrupted decisively by the attack on Pearl Harbor and remained disrupted until the US forces in the Philippines surrendered. In the last years of the Pacific experience, the tables were turned when the Japanese rear was disrupted and kept disrupted while the continuity of the US rear was restored, thus paving the way for the

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decisive defeat of the Japanese forces. In both periods it was air and sea mobility used for the proper purpose which made possible the results.

Conversely, the World War II operation on Anzio illustrates incomplete application of mobility. Superior US mobility was used to establish the beachhead, provide the initial disruption of continuity of the enemy rear, and sustain the beachhead. Without the means, however, to maintain the disruption and thereby make possible the destruction of the enemy, the operation failed to achieve maximum results. The enemy, on the other hand, was able to reestablish the temporarily disrupted continuity of his rear and contain the beachhead forces. The inability of the enemy, however, to destroy the continuity of the beachhead rear ultimately resulted in failure to eliminate it.

In a similar manner the Allied airborne operation at Arnheim and Nijmegen can be demonstrated to have failed in part because of the Allied inability to establish and maintain continuity of the rear or, conversely, because the Germans denied continuity of the rear.

In World War II and prior wars there were many instances in which the initial disruption could not be effected due to the relative balance of forces engaged. Operational restrictions during the advanced stages of the Korean War prevented the achievement of optimum disruption of the enemy rear thereby precluding success. In other instances the initial disruption was made without the essential followup to continue disruption. In still other instances the concept was not applied for lack of audacity or lack of appreciation of the possibilities inherent in a situation, even when the opportunity existed. In this latter instance the essential capability of exploiting mobility may have existed but was not used.

Conclusion

The use of nuclear weapons in any future war opens opportunities for exploitation of mobility greatly exceeding those ever before existent. The US can capitalize upon these new opportunities to achieve a significant advantage over potential enemies.

US strategic and tactical concepts must be based primarily on the exploitation of mobility which has as its purpose the disruption and subsequent denial of the continuity of the enemy rear aimed, in turn, at the destruction and defeat of enemy forces.

Nuclear weapons multiply the capability for the disruption heretofore achieved and maintained with difficulty. The increasing mobility of supporting systems makes possible the support of forces engaged in fluid operations.

We are now building into our forces the characteristics necessary to exploit this mobility advantage. Such characteristics include mobility and flexibility in supporting systems such as communications, supply, and transport; balanced combat elements with a high degree of self-sufficiency and capability for semi-independent operations; weapons systems capable of delivering nuclear warheads; a tradition of audacity and maneuver; and supporting sister services geared to the support of mobile operations. Not only can such forces disrupt the continuity of the enemy rear, but they can maintain this disruption sufficiently to defeat the enemy. On the other side of the coin, mobility in our supporting systems can be exploited to maintain or restore our own continuity of the rear in the face of enemy attempts to disrupt it.

Through purposeful mobility, US forces can achieve the advantage leading to victory in future war.

The Dilemma of Simplification

Lieutenant Colonel Marion W. Walker, *Artillery*
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WITH the advent of nuclear firepower for support of tactical operations, the Army found that it had a highly technical new weapon for which employment procedures had to be established. Initially—because of the complexities of the various nuclear weapons systems and the general lack of detailed information—complicated technical procedures for tactical employment were adopted. This placed an aura of “mystery” about these weapons which has not yet completely disappeared from our employment concepts.

In retrospect, it is sometimes argued that such procedures were partially responsible for the slow progress which the Army made in developing modern doctrine for employing nuclear weapons tactically. This is not to say that the pioneers in this field were not farsighted enough to appreciate the need for simplified procedures for the tactical employment of nuclear weapons. On the contrary, they did a remarkable job considering the handicaps of security classification, incomplete weapon effects data, technical complexities, and the lack of trained personnel in the nuclear weapons field.

In fact, all agencies have constantly stressed the need for simplification of procedures. History will bear out the fact that we have continually improved procedures in varying degrees. We have progressed from exclusive use of the slide rule and complicated formulas to the present-day simple “tools” for target analysis—a ver-

tical dispersion table with an acetate scale, a straight edge, and a pencil. These “tools,” of course, are not the ultimate. Further improvements are in the making.

Increased Tempo

Improvements in the technical procedures have been made steadily over a period of several years dating back to 1952. However, the most dynamic achievements have been made in the last three years, as is true for the entire field of nuclear weapons employment. The fast tempo of technological advances in the past few years has pointed up the necessity for the entire Army to reshape its thinking toward the nuclear battlefield.

At the U. S. Army Command and General Staff College the requirement for modernization of thought culminated in a complete revision of the 1957-58 curriculum. Simultaneously, the College was reorganized along functional lines to perform better its instructional and doctrinal mission. In the revised curriculum, the use of nuclear weapons was treated as a normal situation rather than something “special,” as had been the case in the past. This emphasized the need for simplification of procedures for tactical employment of nuclear weapons.

The Commandant, USA CGSC, directed an all-out attack to improve understanding in this area. Simplify the procedures to the extent that the “technical” stigma is removed and usage becomes routine and

Although less complex systems are always desirable, we must ensure that we are not in danger of oversimplifying the methods and the procedures pertaining to the tactical employment of nuclear weapons

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easily understood was the underlying philosophy. Simple procedures always will be a "must" for field use. As a result of this all-out effort, the College has developed target analysis procedures which have removed practically all technical calculations. These latest procedures in use at the College are contained in Department of the Army Pamphlet 39-1, *Nuclear Weapons Employment*, dated May 1959, and Field Manual 101-31, *Staff Officers' Field Manual, Nuclear Weapons Employment*, dated July 1959. They are simple, practical, and readily usable in the field to the extent that the use of enlisted personnel as target analysts is being actively planned at this time. These target analysis procedures quickly furnish the analyst with answers and require very little background knowledge as to how these answers were derived.

Answers Without Reason

However, the fact that we have a system which gives the answers without the reason leads to the possibility that we may soon become stagnant in this regard; that is, we may become "simplified" in application to the extent that we lose our capability for further simplification of methods. If the trend continues, we may no longer be training personnel who can recognize the need for further simplification or, if recognized, possess the ability to do anything about it. This then may be the "dilemma of simplification," unless corrective action is taken to prevent it. This dilemma could be upon us in a very few years as the shadows are beginning to slant.

In order to understand better what we can do about this situation, let us consider

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our present program for training nuclear weapons specialists. At the present time, the USA CGSC, six branch schools, and one overseas school conduct courses which award the military occupational specialty (MOS) prefix 5 to the graduate. These schools qualify the great majority of personnel in the *technical considerations in the tactical employment of nuclear weapons*.

Each of these schools is constantly seeking ways and means of simplifying procedures for field use. For instance, the USA CGSC presently is experimenting with a "nuclear slide rule." Prospects in this area are very promising. If this project is successful, we will truly have "every man's handy-dandy pocket size tool for target analysis"—one which can be used in the back end of a jeep on a cold rainy night with results equal to those presently achieved by more elaborate tables and references. Other improvements are under study and will be integrated eventually into courses at all service schools. With these innovations, plus the gradual reduction of hours devoted to this training because of pressure to shorten courses, the newly trained personnel will be exposed to less and less background knowledge concerning how we arrived at these simple procedures for employing nuclear weapons.

In other words, each year newly trained personnel become less qualified as technicians, but more skillful in the application of procedures. Also, each year the Army is losing, through attrition, more and more "hard core" specialists—the pioneers in the field responsible for the development of the entire system. Therefore, each year the potential for continuous progress in this field is diminishing. Theoretically, the Army eventually can reach a point when it becomes stagnant in this area—lacking the ability to improve further. Technological advances are continuing and the Army must keep ahead of these advances—in fact, must set the re-

quirements or else the tail will *continue* to wag the dog.

Expand Training

With the newly trained personnel becoming less and less technically qualified, and with the reservoir of highly skilled technicians drying up, we must take steps to ensure that we have an adequate number of qualified technicians to continue progress. It has become increasingly evident that we lack, even today, the necessary "know-how" at higher echelons to make enlightened decisions on technical nuclear weapons employment problems. In our system of combat developments many agencies are involved in constantly recommending changes in this area. Accordingly, we must have skilled technicians at the higher levels to advise the commander and enable him to make a sound decision pertinent to these recommendations.

The nuclear weapons field is vast, encompassing problems of national defense policy, foreign policy, production, and use for which the Army must be prepared to represent its needs accurately and intelligently. These facts led to a significant conclusion by one of the seminar groups in a Combined Arms and Services Conference conducted at the USA CGSC. It was concluded that there is an urgent requirement for training Army officers in Army doctrine for the technical and tactical aspects of nuclear weapons employment, for service at the *policy level* in the Zone of Interior Army, US Continental Army Command, Department of the Army, joint staffs, and comparable overseas headquarters. No current army program provides such training. Regardless of how simple we make the field procedures, the Army will continue, as long as nuclear weapons are available, to require technicians to keep abreast of technological advances. The Army needs experts both to develop procedures further and to represent its interest in the national defense program.

Skeptics will argue that this represents

a premature opinion since, in the field, we have not yet reached the desired goal for simplification. This is true; it is a long-range program. However, recent advances indicate that we are just around the corner from achieving this goal. We must look ahead and plan now so that we can prevent a dormant situation such as was witnessed in the over-all field of nuclear weapons employment during the years 1945 to 1955.

Long-Range Program

Set forth below are recommendations for a general long-range program to prevent our "dilemma of simplification."

1. Expand the present program of prefix 5 training to additional branch service schools. Gradually revise the program of instruction in these schools to train personnel in the minimum requirements for operations in the field. Here, maximum utilization of simplified procedures should be used. Time required for such training will be reduced. Eventually, this type training should be a routine requirement for *all* officers and selected enlisted men. At that time remove the MOS prefix 5 designation.

2. Expand the present USA CGSC five-week Nuclear Weapons Employment Course (NVEC) by adding necessary additional *training* to enable the graduate to perform duties at the highest echelons, that is, Department of Defense, Department of the Army, and USCONARC. The present curriculum should be increased to cover instruction in the nuclear weapons field as influenced by the national defense policy, foreign policy, industrial management, research and development, and logistic requirements. This instruction would include nuclear weapons production problems and the national-level problem of allocating fissionable materials. It is estimated that about two or three additional weeks would be required for this purpose; however, this is subject to more detailed study. The graduates of this course would be *trained*

(not oriented) to perform duties as doctrinal research technicians in service schools and other combat development agencies, and as technical experts in appropriate positions in Department of Defense, Department of the Army, USCONARC, and higher echelons of field commands. Graduates of this course should be awarded an MOS prefix which will distinguish them from present MOS prefix 5 officers.

3. Establish the requirements for the type positions requiring the general qualifications indicated in the preceding paragraph. Conduct the course indicated in paragraph 2 at the necessary frequency to fulfill these requirements.

4. Establish a personnel program for systematic assignment of graduates of the course described in paragraph 2, above, to the positions established by the action recommended in paragraph 3.

Conclusion

There is a continuing need for further simplification of procedures for employing nuclear weapons on the battlefield. Major improvements in this regard have been made and will continue to be made. However, it is possible that we may lose our capability for further simplification. Implementation of a program such as the one recommended here will assist in preventing this "dilemma of simplification."

... knowledge of a single field—no matter how thorough—is not sufficient today for a man to consider himself educated, even when his knowledge is accompanied by the ability to reason clearly. Almost every major course of action involves the consideration of factors stemming from a number of different fields of activity. Effective pursuit of any such course of action requires that these factors be blended and balanced. There are broad overlapping areas between the fields of government, industry, commerce, the professions, and all the other aspects of our society. Within each of those fields, also, there are overlapping component areas. To cite the activities of government as an illustration, decisions in the field of foreign affairs and policy involve military, economic, and political considerations, among others. By the same token, military planning must be carried out in the light both of diplomatic objectives and available economic resources, as well as in the light of a very large number of other factors. . . .

It is true that we have progressed to the point that the mastery of practically any single field of endeavor involves the absorption of an enormous amount of detail. At the same time, I believe that it is more vital today than ever before for men of responsibility to acquire an extensive knowledge of areas which, although outside their own fields of specialization, exercise an important influence upon them.

General Lyman L. Lemnitzer

Dual Strategy for Limited War



Captain Boyd T. Bashore, *Infantry*

Student, U. S. Army

Command and General Staff College

THE plane roared forward in the moonlight and lifted from the palm and bamboo fringed airstrip. Painted in white script on the polished aluminum nose of the C-47 was the name Mount Pinatubo—the dominant peak in the Province of Zambales north of Bataan. Here, Ramon Magsaysay, as a young guerrilla leader, fought the World War II Japanese occupation troops.

Minutes later in a violent blinding crash 3,000 feet high on the jungle-covered slopes of another Philippine mountain, Ramon Magsaysay—President of the Republic of the Philippines for almost three and a half years—died. Perhaps more than any other single event in recent years this tragic accident marked the end of one of the most ignored wars in military history; marked the end of an era of approximately 11

years which was a milestone not only for the Philippines, but for the entire Free World.

Unfortunately, perhaps, it also marked the beginning of an era during which, more and more, variations of the type of war that Ramon Magsaysay fought may become the only mode of conflict possible for ground armies operating within the twin shadows of the aggressive ambitions of world communism and the forced atmosphere of tranquilization generated by the presence of tactical and strategic nuclear weapons—the age of limited wars.

Lieutenant General James M. Gavin, Retired, in his book, *War and Peace in the Space Age*, predicts:

In fact this is the most probable nature of future war, a slow, almost impercepti-

The overt communistic armed rebellion waged for over 11 years in the Philippine Republic—a classic example of one type of limited war—may be a harbinger of future limited war in other troubled areas

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ble transition of a bad economic and political situation into internal disorder. Arms will be provided by the Communists to the side they choose, and sometimes which side they choose is not very important. They will throw out the original leaders and substitute their own, including their own revolution of the 'proletariat' at a time of their choosing. Thereafter, sufficient force will be used, until combat-ing it no longer seems worth the effort to the West, or until the West is decisively defeated.

This is, in effect, one important phase of the classic Communist concept of "protracted war" as formulated by Mao Tse-tung. This is almost what happened in the Philippines.

Study Desirable

Americans should study the Communist campaign which was waged in the Philippines because it may be a harbinger of a type of warfare to come, a classic example of one type of limited war. In addition, it should be studied because Magsaysay won his war and thus became the only democratic leader in Asia, and one of the few in the world, who for all intents and purposes completely defeated an overt communist armed rebellion in his country.

Today, 600 miles west of the Philippines, the mainland of China lays totally under Red domination, a festering cancer which is spewing out the germs of world communism and encouraging neutralism throughout all of Asia. To the North, Ko-

rea remains divided—north and south—both sides glaring covetously toward the 38th Parallel, the split breeding all the hatred and frustration that an unfinished war can produce. To the west, Indochina also lies divided with North and South Vietnam, like Korea, the frustrated victims of an unfinished war and a distasteful compromise truce of the type that may become progressively more frequent in the peripheral or brush fire type war.

Of all the countries of Asia which have been subjected not only to the theoretical siren's song, but also the flaying fists of international communism, only the democratic Philippines has emerged completely victorious. This is a free undivided nation which certainly is no question mark on the ledger; a nation that has not had to weaken its government by compromise and accept a split country or dual leadership with the Reds. The Republic of the Philippines is, in fact, one of the few countries in Southeast Asia which have dared to outlaw the Communist Party within the shadow of the slumbering Chinese dragon.

By 1953 the backbone of the Hukbala-hap, the Tagalog name for the military arm of the Philippine Communist Party—the Huks for short—had been broken effectively as a serious threat to the freedom of the Philippines. But as a result of a series of Huk atrocities as late as the spring of 1956, Magsaysay suspended all training and schooling in the Philippine Army. He deployed the 26 battalion combat teams of the army into the field throughout Central Luzon. This campaign was meant once and for all to bring the Communists to heel.

On the day Magsaysay died, 17 March 1957, the Philippine armed forces still were engaged in this anti-Huk peace-and-order campaign, although admittedly the effectiveness of their purely military combat operations was coming to the end. That this final campaign was essentially successful can be seen in the fact that in the spring of 1958, one year after Magsaysay's

Captain Boyd T. Bashore was graduated from the United States Military Academy in 1950. He served with the 2d Armored Division in Europe, and was assigned to the Joint United States Military Advisory Group to the Philippines for two years during the latter part of the Huk campaign. He was with the Office of the Deputy Commanding General, Fifth Army, prior to coming to Fort Leavenworth where he is a student in the 1959-60 Regular Course of the U. S. Army Command and General Staff College.

death, the reorganized Philippine Army conducted its first joint division-size maneuver since before World War II. For the first time since the founding of the new Republic, the Philippine Army is out of the business of fighting Huk's, stripped of its internal security mission, and is beginning to take its place as an available force in the Southeast Asia Treaty Organization (SEATO).

Significance

It may be significant that the government which won this particular war was neither a true nor a constitutional monarchy; neither a "democratic" dictatorship nor a colonial government controlled from a distant parent nation. This war was won by the only nation in Asia, and perhaps the world, which has a republican government that is somewhat like our own, modified only by the realities of the country itself, its geography, and the heritage and temperament of its people.

Political, economic, technological, psychological, and sociological factors, of course, are all extremely important, and must be considered in any realistic appraisal of the history of this Huk campaign. These are the *strategic* factors of the cold war. Unless each individual government, no matter what its form, can offer the majority of its people something better than communism, then the bitter seeds of communism will continue to nourish and grow. Under our concept of government and world aid these internal factors, no matter how important they may be in the outcome of the struggle, cannot be controlled by the American statesmen and military men whom we entrust with the responsibility of winning this cold war. Essentially, we are pledged to support the *status quo*. As differentiated from the Communists in their protracted war, we are *not* committed to the principle of making over other nations and governments in our own image.

Robert Strausz-Hupe has stated:

The West has neither a doctrine of protracted conflict nor an international conspiratorial apparatus for executing it. What is more, we do not want such a doctrine or such a political apparatus, for it would be a tragic piece of irony if the men of the Free World, in trying to combat the communist, should become like them.

Thus these most important factors remain only the internal responsibilities of the people of a nation themselves, their political, economic, and religious leaders. As Americans we must concern ourselves not so much with these strategic factors, as with the *tactical* aspects of winning this type war. Unfortunately, we will see that in Magsaysay's kind of war the strategy and tactics sometimes become so intermingled that they cannot be considered separately.

Bitter War

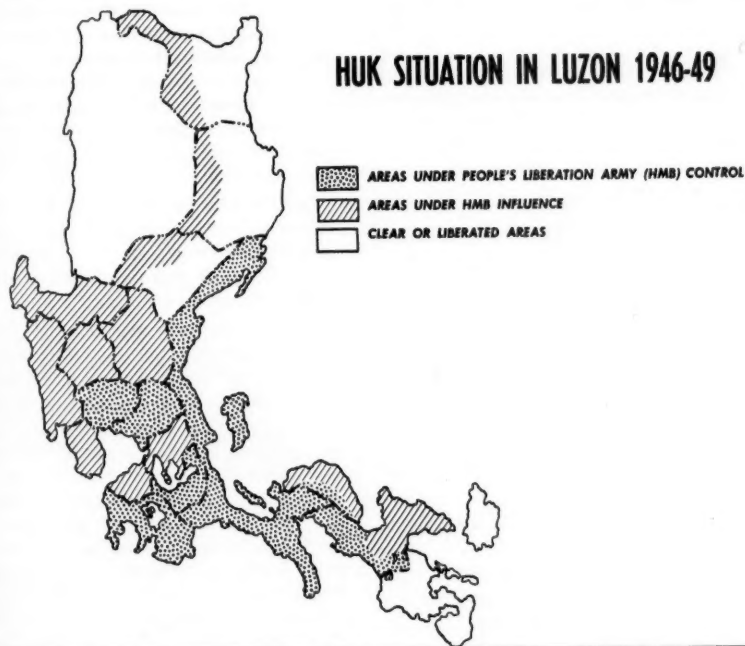
The Huk campaign was a war as bitter, unglamorous, and thankless as any ever fought. It was guerrilla warfare at its worst. Countryman was pitted against countryman. It was a war in which the rules of land warfare and the Geneva Convention were unknown. Often it showed itself only in criminal acts such as extortion, kidnapping, and murder. It was fought by an enemy who varied from a single sniper in the cogon grass to battalion-size organizations—an enemy who seldom wore uniforms or markings, only the local civilian dress, and who one minute could appear to be a peaceful farmer or worker, and then the next minute could become a dangerous killer. No neat order of battle showed on the map with the traditional armies, corps, and divisions squared-off symmetrically against each other. It was certainly a hot war, but one in which at times all the expensive machinery of modern warfare—the airplanes, the tanks, and the heavy artillery and trucks—stood by idle. They were not worth the services of a single planted informer who would empty his carbine into the sleeping bodies

of the Huks who mistakenly might have accepted him as one of them.

Militarily this was initially a war of company and battalion-size units. Patrols and check points were spread out at great distances from one another, searching for and sometimes finding and fighting an il-

initially and some of the tactics that are beginning to emerge as the accepted techniques of the United States Army in nuclear warfare. Certainly, there were no new "principles of war" developed in this Huk conflict, but the emphasis that was laid on the various time-worn principles

HUK SITUATION IN LUZON 1946-49



lusive enemy who usually had all the advantages of fighting or not depending on his whim—an enemy who further chose his own time and place for the scrap with infinite care. In its later phases, in between small unit clashes which became less and less frequent, it degenerated primarily into a war of intelligence and psychology.

A student of today's changing military doctrine immediately will see certain sketchy similarities between the spread-out fluid war that the Filipinos fought

is interesting and unique in many cases, as were the methods of application.

Review of History

Before studying the tactical and strategic lessons learned during this Huk campaign, it would be well to review the history of the Philippines briefly. In order to understand this civil war, one also must be aware of the fairly well-known goals of international communism, something of the Filipino people, and what came before the years 1946-57.

The Filipinos, individually and in small bands, have desired and fought continually and bravely for freedom since before Chief Lapu Lapu killed Magellan within a few miles of where Magsaysay's plane crashed. And yet, due to the caprice of nature which divided their country into 7,000 islands, and all that such a configuration has meant since the dawn of history to communications, ethnics, and national unity, they have been for years essentially a divided people and, consequently, more easily subjugated to imperialism and colonialism of various types. China, Spain, America, and Japan at one time or another have controlled all or major portions of the islands, and each country in its own way has fanned the same sparks of nationalism among Filipinos that are burning fiercely elsewhere throughout the Far East from India to Korea.

A detailed study of why the seeds of communism grew in the Philippines will not be attempted here. Some knowledge of this local brand of Philippine communism, however, is necessary to understand the initial mistakes that were made in combating it and the tactical principles that finally were successful.

Philippine communism was married officially to international communism some time between 1928 and 1930 with the foundation of the Communist Party of the Philippines (CPP). The CPP was admitted to the Comintern in 1932. The seeds of this movement probably were sown in 1920 during the Congress of the People's of the East at Baku, when the Communists met with the ultranationalists from all over Asia and attempted to breed communism with nationalism and anticolonialism. The seeds were nourished locally in the Philippines by the same discontent which had bred communism in other countries throughout the world—poverty, lack of work, exploitation of people in certain classes, and perhaps an intellectual class with no place to go.

Major Differences

There were, however, major differences between the Communist movement that occurred in the Philippines and the "pure" Marxist revolution that the intellectuals felt should occur. The economy of the Philippines is primarily agricultural even today. Because the industrial revolution has not yet profoundly affected the island's economy, there is only an extremely small class of industrial "workers." As envisioned by Karl Marx, of course, the Communist revolution will evolve in various countries throughout the world as a result of the subjugation of the new working class, the industrial proletariat.

Lacking this force base of discontented workers, the Filipinos, as in other agrarian countries, seriously had to modify the theory of pure Marxian communism and attempt to evolve their own brand.

This requirement was not new. At the time of her revolution, Russia was largely agricultural; China is today. The successful revolutions in these agrarian countries have exposed the fallacy of pure Marxist communism. The fact that the successful "revolutions" have occurred in the non-industrial countries, while the peoples of the truly industrial nations have held aloof, has led to the acceptance of the modified Leninist concept of communism which basically substitutes the struggles between states and peoples for the struggle between classes. This Leninist concept, after a considerable incubation period, is the modern-day popular brand of international communism practiced by Russia.

In evolving a popular nationalistic brand of communism, the Filipinos have not been so successful as their international compatriots. During the early years the leaders of the local party continued the classic strength-sapping internal debate between Marxist purists and "heretics" about whom should form their "mass" base—the farmers or the workers?

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fortunate to have this senseless internal debate raging within the Communist Party, a factor which retarded the spread of communistic theory to the masses during the early years. Essentially, communism first was limited to leaders of the peasants and factory workers who debated furiously among themselves. This debate lasted almost up to the beginning of World War II.

The impoverished Filipino tenant farmers who live in the rice and coconut grow-

Fighting Qualities

The volatile Filipinos have never loathed a fight. As a rule they are fearless individual fighters, proud and sensitive, cunning, generally in good physical condition, and unrelenting and aggressive in the clinch. The Filipinos fought the Chinese pirates, they fought the Spaniards, they fought the Americans, and they fought the Japanese. Approximately 500 minor and 25 major disjointed uprisings occurred prior to the time the Filipinos



Combat units of the Philippine Constabulary headquarters preparing to move out for redeployment in critical areas

ing provinces north and south of Manila, however, long have been ripe for some type of "revolution," whether economic, sociological, or industrial. For years they were subjected to many forms of abuse by various factions. The people still are poor, they are discontented, and naturally they want to better themselves and their lot. This is human nature. This also is a cause and the effect of modern Philippine communism. The field long has been ripe for something—anything.

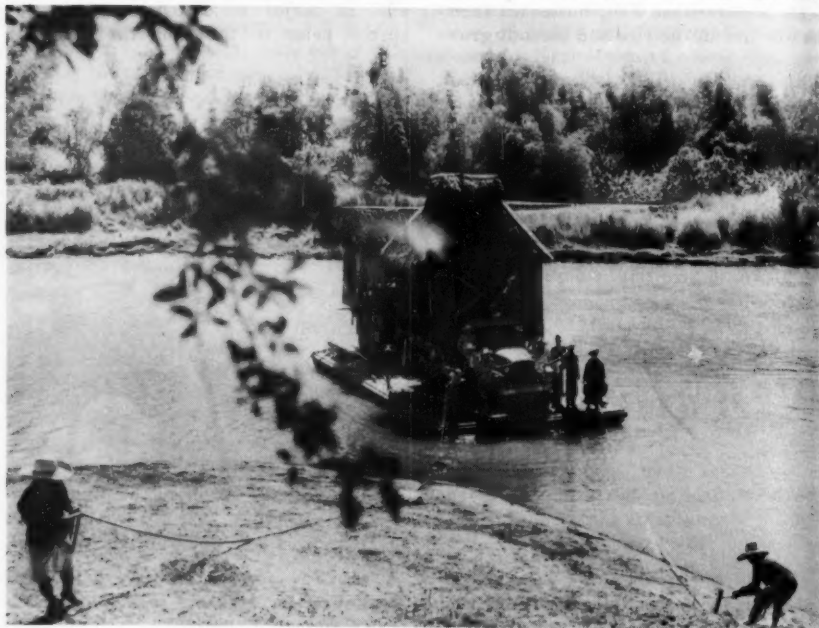
finally were given their sovereignty. The fighting spirit certainly was not lacking. What was lacking, in the early days, perhaps, was a strong leader with ability to unify and the facilities to communicate. And the greatest "failure" of all in the sphere of international relations at any time was the simple crime of being too weak industrially to demand and get their way. In spite of Communist claims to the contrary, these first Filipino rebellions—whatever they lacked in coordination and

unification with one another—certainly were not communistic in nature. Few of the fighters had any goals other than freedom or personal power. The rebellions were the effects of a growing nationalism, not communism.

When the United States quite unexpectedly and unintentionally found herself guardian of the Philippines at the end of the Spanish-American War, we felt heir

With the fall of the Spanish, because of what we considered to be a lack of any capable national Philippine government, we gradually developed the sound national policy of educating and training the Filipinos toward eventual self-government and independence. This sociological goal we lived up to faithfully.

During this period of American control, the small elite nucleus of the CPP con-



House is ferried across the Pampanga River in Army's reclamation effort

to these problems. Unwittingly we perpetuated many of the social and economic abuses under the Treaty of Paris in which we guaranteed that the economic *status quo* in the islands would remain essentially unchanged. This can neither be held for nor against us. In those days of colonialism, "total war" was unknown and we could hardly have been termed a nation bent on revolutionizing the existing economic situation in any country.

continued to grow and operate under various guises, even though driven underground in October 1932 when the Supreme Court of the Philippines declared the CPP illegal.

When the Japanese occupied the Philippines in World War II, there was little question but that the Filipinos would continue to fight wherever possible. This they did. They fought under their own local democratic leaders—Lim, Magsaysay, and

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Garcia. They fought under Americans like Anderson, Volckman, Lapham, and Parsons. And they fought under such Communists as Taruc, Jesus Lava, Mateo del Castillo, and Alejandrino.

Huk's Organized

On 29 March 1942 the CPP formally established a guerrilla force called Hukbalahap—*Hukbo ng Bayan Laban sa Hapon*: "People's Army Against the Japanese." Initially, the Huks were led by a coalition government. The two main factions were Socialists, who actually were the remnants of the driven underground Communists of 1932, and the pure militant Communists. These groups began to vie for power. When they did, the Huk movement lost direction.

Chinese Communists were ordered to the Philippines to help reorganize the Huks when these local leaders began to fight for power among themselves. Ong Kiet was the Chinese "field general" who crushed the pseudocoalition of Socialists and Communists. By 1943 the Hukbalahap was completely in militant international Communist control.

The commanders of Huk units were most powerful in the critical rice and coconut growing areas in Central Luzon north and south of Manila where the Communist and Socialist causes always had found the greatest support. They divided their area into military sectors, districts, and regional commands. These areas, to all intents and purposes, they controlled effectively. During the Japanese occupation their strength continued to grow. To form their logistical base, the Huks activated the Barrio United Defense Corps (BUDC). In 1946, during the Huk-Constabulary conflict, the BUDC was reactivated as the National Peasant Union (PKM). Both the BUDC and PKM collected supplies and arms for the Hukbalahap, and were used also as vehicles for spreading communism to the peasants. Eventually, the Huk strength rivaled that of the guerrilla

units that were organized and supported by the United States Armed Forces Far East (USAFFE). (MacArthur, in a far-seeing decision, refused to give arms to the Huks. The Huks, in turn, refused to join or accept orders from the USAFFE.)

The growth of the Huks at this time can be attributed as much to a popular patriotic desire to fight the Japanese, as to any true understanding or acceptance of the principles of communism by a majority of the guerrillas. No matter under what guise, the Huk leaders, in the eyes of many Filipinos, now had skillfully welded their cause with both nationalism and the patriotic battle against the Japanese. The Huk's long-range mission was clear, however, from their combat objectives. They often fought as aggressively against the non-Communist USAFFE guerrilla units as they did the Japanese.

The pattern of Huk strategy before and after the war ended was familiar. Basically, the same over-all plan was followed with minor local variations in almost every country devastated by World War II. Into a vacuum of government and economy left by the fighting, the Communists turned on their weakened countrymen and attempted to gain control of the government by force.

Series of Reverses

However, at this critical time the Huks lost face in a number of fields. Two of their duly elected politicians, Luis Taruc and Jesus Lava, were unseated in free elections. Government troops committed alleged "abuses" against many of the Huks and their sympathizers. A number of Huk leaders were killed or imprisoned. In addition, the Americans continued to refuse to recognize or pay any except one Huk ex-guerrilla unit as "legitimate." Unfortunately, at this time there was no practical alternative to not recognizing the Huk units, although certainly this helped drive the Communists into the hills. The power, prestige, and funds that would have ac-

accompanied official American recognition of the already powerful Huk leaders would have galvanized the Communist cause at the very birth of the infant Philippine Republic. Even more power would have flowed into their legal "Parliamentary Struggle." Frustrated and infuriated by this series of reverses in which they lost face, the Huks initiated an orgy of grudge and revenge killings.

At first the new Philippine democratic government considered the Huk military actions to be primarily a "police matter." During this same period many non-Communists, who were more outlaws and bandits than ex-guerrillas, fell into the embrace of the Huks because they lacked anywhere else to turn. Because of this association with criminals, the Huk depredations in so many instances looked like an upsurge of the lawlessness that sometimes flourishes after any war. There have always been bandits and outlaw bands in the Philippines.

A trial and error police-style campaign of combating the dissidents was initiated. The former Secretary of National Defense, Jesus Vargas, summed up those early attempts by saying:

A remedy would be applied, and when it did not seem to work out, it was revised or discarded for another. In this we were fortunate that the situation allowed for a certain degree of experimentation.

"Mailed Fist"

When Manuel Roxas became the president of the newly created Republic in 1946, he tried to persuade the Huks to disband their military units, surrender their arms, and return to peaceful living. The Huks defied Roxas and continued their reign of terror. To counteract this display of force, Roxas implemented his "mailed fist" policy in September 1946.

Troops from the National Police Force, the Philippine Constabulary, were deployed in the areas of maximum disturbance. But what was already a festering

situation was made worse by committing untrained military police units to an extremely delicate mission. This first use of troops afforded little security to the people. Depredations continued. Farms, and in some cases entire barrios (villages) were abandoned. This further weakened an already strained national economy. Travel on highways became dangerous.

As noted, a serious weakness appeared in the ranks of the democratic Philippine Constabulary. The choice of many of the Constabulary officers and men had been haphazard. After four years of occupation, their training at best had been cursory or spotty. They were sent into a battlefield that was both military and sociological. With little firm guidance other than "use force," some returned abuse for abuse, frequently treating their own countrymen as people of an occupied territory. The "mailed fist" often was indiscriminately applied to civilian friend as well as military foe. Soon many Filipino farmers and civilians feared the Constabulary troops as much or more than the Huks. This destroyed the respect and confidence in many of the people, not only in their armed forces, but in the central government. In many areas of Luzon the people now openly supported the Communist troops.

At this point a reaction against brute force occurred and the government, now under President Quirino, decided to attempt a new policy of amnesty. After months of fruitless naive negotiations, rampant with Red duplicity, this amnesty policy collapsed and in 1948 the government again resumed the "police action." The respite had given the Huks an opportunity to reorganize, rehabilitate, replenish, and stockpile critical items such as ammunition and medicine.

Name Changed

By 1949 the success of Mao Tse-tung in China and the Ho Chi Minh struggle for Indochina further invigorated the Commu-

ists in the Philippines. Should the plans of international communism be fulfilled, all of Asia, except possibly Japan, soon would be Communist dominated. The CPP now changed the name of the World War II Hukbalahap. The new army took the more appropriate revolutionary title of "People's Liberation Army," *Hukbong Magpapalaya ng Bayan* (HMB). No longer was there any question about the basic in-

greatest advantage in combat—they were on the offensive.

The HMB's, of course, were only the armed forces of the CPP, with "Major General" Luis M. Taruc as the chief of staff. As in any Communist state, the HMB was an instrument of the party. Pyramided above this military was a complete revolutionary civilian government. The secretary general of the party, Dr. Jesus



Commando unit in training

tent of the renewed Huk conflict—this was revolution!

The year 1950 was the most critical for the young Republic. The HMB's were at the peak of their power. They stepped up their rampage of terrorism with kidnappings, murder, arson, and looting. Although the HMB guerrillas were only moderately well-equipped with light weapons, and certainly were not well-trained in anything above individual and small unit tactics, they had on their side the

Lava, a disillusioned intellectual, probably could be considered the leader of the Communist Republic of the Philippines. Filipino estimates vary, but most agree that the Communist strength consisted of around 19,000 active Huks, supported by 54,000 sympathizers. By 1952 the Reds felt they would have an armed strength of 173,000 Huks, supported by a mass base of 2.5 million active sympathizers to carry their revolution.

Further fanning the fury of the HMB

attacks, the North Korean Army struck south in an attempt to unify Korea into a single communistic state. The Huks now successfully staged large-scale raids near Manila, and plundered several important towns in central and southern Luzon. Fertile fields and towns were deserted. HMB's controlled other major portions of the countryside, governing towns and barrios, collecting taxes, tributes, and ransoms, occupying the farms, and running military and civilian schools. They rode high on the hostility that was inherent in the tenant-landlord relationship in central Luzon, and the fear that had been instilled in many places for the Philippine Constabulary forces. One-half of their Politbureau flourished in Manila; the other half worked in the "field" with the troops.

In all the confusion, however, one thing was certain. The newly born democratic Philippine Republic was approaching economic chaos. Graft and corruption plagued the government. In the face of a vacillating governmental policy toward the Huks, compounded by the army's own weakness within its ranks, the armed forces were ineffective.

Indeed, the Filipinos were in grave danger of losing their limited war. These were dark days for "The Showcase of Democracy" in Asia.

Secretary Vargas said:

About the only redeeming aspect of the situation was the realization by the officials of the government and later by the nation that the solution of the problem was well beyond the reach of normal police action and that a more integrated national effort had to be exerted. . . . The Armed Forces were called upon to spearhead the antidissident campaign, which originally was entrusted to the Philippine Constabulary alone.

Ramon Magsaysay

At this point Ramon Magsaysay began to play his ever-increasing role in the Huk campaign. During World War II, Mag-

saysay had been active in the resistance movement against the Japanese in his home province of Zambales. As a young USAFFE guerrilla leader, he participated with the American forces in the liberation of Zambales. After the war he had been elected to Congress where, as a member of the House of Representatives, he eventually was appointed chairman of the powerful Committee on National Defense. Thus although Magsaysay certainly was not a professional soldier, he was a proved civilian leader who had a splendid background in the Philippine military field. Therefore, on 1 September 1950, President Quirino appointed Ramon Magsaysay Secretary of National Defense.

As the newly appointed Secretary of Defense, it was Magsaysay's job to cut out the Huk cancer and prescribe the cure. His first step was to reassess the Communist problem and determine why and where the government had failed in the past. Although technically his field of responsibility was restricted to the military, Magsaysay quickly saw that the military tactics of the antidissident campaign were unavoidably chained to the entire spectrum of the strategy of national internal policy.

In his research, the strategic crux of the entire fight against communism was discovered—or rather again realized—by Magsaysay. Simply stated it is:

Any 'democratic' government is neither of necessity nor automatically better in the eyes of the common man than a communistic government. In order to stamp out communism, the local government must clean its own house. A status quo that has bred virulent communism cannot remain unchanged. Communism seldom flourishes where the people are content and prosperous basically.

Magsaysay decided that popular support for Philippine communism existed for the following reasons.

1. In high circles the new democratic Philippine Government had drifted slowly

resistance toward what some people term the "traditional" Asian acceptance of inefficiency, graft, and corruption as the prerogatives of those in power.

2. The people had received abusive treatment from some of the military.

3. A lack of any national socioeconomic reforms, compounded by the people's almost universal poverty, caused great masses to feel that the national government was not interested in them, while the Communists were.

National Policy

Communism showed itself most dramatically in the Huk military campaign. Mag-saysay realized, however, that in order to combat it there had to be, in addition to military action, a many-faceted political, psychological, technological, and socioeconomic operation in the Philippines. Mag-saysay implemented a sweeping national policy. His tools were the "left hand" and "right hand" efforts: The government extended its left hand in friendship, while the right hand was used to deal ruthless military blows. All-out force and all-out friendship were combined. Simply stated, the government promised mercy and help to those misguided elements who voluntarily sought peace and renounced communism; it promised all-out force against those who continued to defy the government. Each of these policies was to be emphasized on a priority basis. First, of course, a military victory was needed through the application of all-out force.

The Filipinos now realized that if their armed forces were going to counter this small unit hit-and-run type of Huk guerrilla warfare, they needed to be reorganized and revitalized completely. The company-size military police units that had been bearing the brunt of the Huk fighting had proved weak and ineffective. However, the Philippine armed forces themselves consisted mainly of administrative, service, and training elements that had assisted in the World War II USAFFE

liberation campaign. Fighting organizations were lacking. There were only two infantry battalions available. However, conventional divisions or regiments were not necessarily appropriate for this impending fight.

The solution was the activation of 26 self-sufficient battalion combat teams (BCT's). The combat elements of the BCT's consisted of three infantry rifle companies, a heavy weapons company, a field artillery battery (whose members doubled in brass as infantrymen), and a reconnaissance company. The administrative and service portion consisted of a service company, a headquarters and headquarters company, an intelligence section, a psychological warfare section, and a medical and dental detachment. The table of organization and equipment strength stood at a high of 1,047 officers and men, although actual strength varied from full to reduced strength depending on the tactical missions of the unit.

The BCT's were under a unified sector command which had a small tactical headquarters. Two or more BCT's were attached to sector as needed based on the situation. The sector commander was capable of massing units for larger scale operations similar to a combat command of armor. When the Philippine Constabulary was integrated into the reorganized armed forces, the total strength of the military establishment was about 30,000 officers and men.

Strategic Reserve

Small mobile Scout Ranger teams were the army's "strategic reserve." Flown or driven into a critical area, the rangers backed up the BCT's when and where needed. In splendid physical condition, these squad-size units were capable of sustained scouting and patrolling for as long as seven days without resupply. They carried the battle to the Huk in the jungle wilderness of the Sierra Madre Mountains and Candaba Swamp, the heart of their final bastions.

Detachments also were stationed throughout the country to secure key terrain features that did not justify the use of a BCT, such as water holes, road junctions, and small barrios. Liberal experiments were conducted with every type military unit that might help in the fight, from scout-dog platoons, horse cavalry,

Huks. Their mission was mainly defensive, to secure a community, thus freeing the regular troops for offensive combat operations. To settle the inevitable misunderstandings, Civilian Advisory Committees were established.

As in any warfare, the mission of this right hand effect was to destroy the HMB



Former Huks renewing oath of allegiance to the Republic

and close air support to airborne troops. Their further use depended on proved results. Most of the sophisticated methods of modern combat, it was found, could not do the job of the "traditional infantryman" and they were dropped.

"Civilian commandos," able-bodied armed civilians representing a menaced community, were led by regular servicemen and equipped to fight back against the

army. To facilitate this, tactical training was improved. Constant conventional patrolling and small unit combat were initiated. An effective all-out drive to eliminate the HMB sources of food and supply was started. Every conceivable type of unorthodox operation was combined with the "conventional" guerrilla warfare: sniping; ambushes; surprise raids on HMB schools, camps, and supply points;

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individuals and entire combat patrols disguised as Huks infiltrated the HMB areas; periodic surprise patrols by civilian commandos; and total screening of entire barrios when the HMB's mingled with the civilian populace.

Favorable Results

These plans gave quick and noticeable results. Fatalities in fire fights began to average eight to one in favor of the BCT's and Scout Rangers. Within months it became difficult to find dissident concentrations in sizable numbers. Where before battalion and company-size bivouacs of 100 or more Huks could be found, they now split into itinerant groups of from 20 to 30 and avoided conflict. Later the groups shrunk even further. By 1957 bands of three to five men became common, vainly trying to exist, finally acquiring the instinct of the hunted animals they had become. This is the situation today with less than a few hundred armed diehard HMB's still roaming the jungles and swamps.

As the following figures indicate, the Huks had sustained heavy casualties by 1954:

- 9,695 killed in combat
- 1,635 wounded
- 4,269 captured
- 15,866 surrendered

By various means, 43,000 assorted firearms and 15 million rounds of ammunition had been rounded up; in contrast, only 1,578 Philippine armed forces personnel had been killed and 1,416 wounded.

An important lesson appeared during this period of gradually dwindling enemy strength. As it becomes more and more difficult to make combat contact with the enemy guerrilla units, a needle-in-the-haystack stage is reached where the effectiveness of "conventional" military antiguerrilla operations becomes unproductive budgetwise in simple terms of dollars spent to support the combat forces in the field, graphed against the number of enemy killed or captured. By conventional mili-

tary intelligence means, such as scouting and patrolling, it is no longer possible to find a worthwhile concentration of enemy against which to commit combat units. At the same time, a deceptive feeling of security pervades the government and people.

Unfortunately, at this point, the guerrilla is *not* beaten. The classic military mission of destroying the enemy's forces and their will to fight has not been completely accomplished. In fact, the guerrillas who remain now probably have the most dangerous *potential* of any in the entire span of the fight. These are the diehards, the Moscow-trained leaders, the dedicated Communists around whom a new uprising can spring if they are permitted a respite.

To a degree the Filipinos were fortunate in their campaign to eliminate the hard core leaders. In one bold government raid in the heart of Manila in 1950, they captured one-half of the entire Communist Politbureau. Later, such leaders as Taruc, Capadocia, and the American William Pomeroy also fell, although greater success certainly would have been welcomed. Jesus Lava, one of the ranking leaders of the Communist Republic of the Philippines, for example, today still roams the hills and jungles of Luzon, a sick, hunted man, but as the top Filipino Communist, one who has never surrendered.

When the needle-in-the-haystack stage is reached, combat troops gradually should be drawn out of their unproductive combat mission, and set about other tasks or demobilized, retaining only a mobile reserve, such as the Scout Ranger Regiment for emergency missions. In the Philippines, BCT's were initially kept in position for security reasons and assigned semimilitary public works tasks, as described later. By 1957 they were reorganized into conventional SEATO ground force divisions and regiments and taken completely out of the fight. However, the money thus conserved by decreasing the military op-

erations should not be considered "saved" and the military budget reduced by that amount.

Scale of Rewards

The psychological and covert war is most important throughout the antiguerrilla campaign. But it becomes predominant in the latter "final crushing" stages. A graduated scale of rewards for the capture or for information leading to the capture, dead or alive, of ranking leaders of the movement is continued and emphasized. This makes the hard core and their units even more wary of exposure at the very time they should be able to relax because of the slackening of conventional military activity. The payment of informers and rewards must be decentralized to the lowest field commanders. In order to motivate the flow of current useful information, immediate full payment, or at least a partial payment, must be made wherever possible. The rewards also must be worthwhile, and should approximate cash sums for which the average citizen would work months—and in important cases years—to acquire and save in ordinary labor. In the Philippines, rewards ranged from a high of \$65,000 down. Even rewards of this magnitude were not entirely successful due to red tape, slowness of payment, and conflicting claims.

This phase of the operation obviously begins to depend less on pure military strength and more and more on the mass support of the people, on the civilian citizens of the country itself. It is virtually impossible to destroy the complete combat potential of the guerrillas by military force alone. If, as in the Philippines, the guerrillas are supported extensively by the civilian population, a winning over of the people must occur. This is the goal of the "left hand effort."

One of the keys to winning the support of the people, and to the success of both the "right hand and left hand" policies in the Philippines, was a thorough housecleaning not only in the armed forces but

in the entire government. Magsaysay attempted to eliminate corruption and abuse wherever he found it. This he considered as important as the hot war against the HMB. Initially, in the military, broad powers were given to field commanders to discharge or otherwise discipline men under them. Spot decorations, rewards, and promotions were made. Commanders also were summarily relieved and demotions made. Personal leadership and frequent field inspections of troops and units were stressed by all military authorities. A positive attitude was instilled in the armed forces, replacing the defeatism that had been present.

Outside Assistance

Early in such a fight a decision must be made as to who will do the fighting. Is outside help needed? This is an extremely important decision and, of course, depends entirely on the situation within the country itself. It has much to do with the winning over of the people. The Filipino leaders had to decide whether the situation was serious enough to ask the United States to send in troops. They decided against this action.

Whatever the initial requirements for outside help, every effort should be made to require the nation itself to take over the fight *completely* at the earliest possible moment. Lieutenant Colonel Villa-Rial in his article *Huk Hunter* says:

Foreign troops are certain to be less welcome among the people than are the regular armed forces of their own government. Local populations will shelter their own people against operations of foreign troops, even though those they shelter may be outlaws. For this reason, native troops would be more effective than foreign forces in operations against native communist conspirators. It would be rare, indeed, if the use of foreign troops would not in itself doom to failure an anti-guerrilla campaign.

Also to be considered is the need for

lessor degrees of aid than foreign physical intervention in a threatened country. These opportunities appear primarily in the fields of advice, and in economic and material aid. The United States gave generously to the Philippines in all of these fields, and the place of this aid in winning the Huk campaign cannot be gauged accurately in black and white percentage figures. Needless to say, without the means to wage war, no battle can be won.

Certainly, the Joint US Military Advisory Group in the military field and the

helped the CPP as they did in other Asian countries, the story in the Philippines may not have had the same ending.

When the combat situation became relatively quiet, reduced strength BCT's still were stationed throughout the critical areas. Major General Joseph H. Harper, the last US Military Advisor to President Magsaysay, compared their mission to that of the US Army units stationed at the cavalry and infantry posts throughout Indian country during the opening of our Western frontier. The Filipino troops could not be sent home or demobilized immediately due to the possibility of a resurgence of communism. The detachments spread a feeling of security to the people.

To counteract the ill feelings of the "mailed fist" that had turned the people against the military in the early stages of the campaign, these units were given semimilitary public works projects. Assured that the soldiers would stay in their localities as long as the threat to their lives and property was present, and that the HMB could not retaliate, the people began to have trust and confidence in and cooperate with the troops. The stock in Magsaysay's armed forces began to rise.

Magsaysay Elected President

Magsaysay so captured the confidence of the people that in 1953 he was elected President of the Republic of the Philippines. In this capacity he was able to extend the anti-Communist principles in which he believed to the entire internal Philippine government. It is easiest to review the "left hand" effort from Magsaysay's tenure as President, rather than as Secretary of National Defense, because in this capacity he was able to bring the theory into full play.

It must be remembered, however, that the "left hand" effort was initiated and for the first few years carried out almost entirely by the Philippine Defense Department. Certainly, the Department of Defense of the Philippines, because of this,



The late President Magsaysay (third from left) talking with dissident who surrendered his firearm

International Cooperation Administration in the economic sphere did splendid jobs and contributed immeasurably to the defeat of communism in the Philippines. The Free World was indeed fortunate that the geographical location of the Philippine Islands made it unrealistic for Red China or Russia to give similar economic and military aid to the Communist government on the Philippines. If the Reds had

was unique among defense establishments throughout the world. It made itself felt in every corner of the "civilian" government. It controlled or participated heavily in such seemingly nonmilitary fields as: agrarian reform; economic aid; public works (in the rural development program); medical aid; justice (it provided "Courts on wheels" to arbitrate agrarian problems and institute harmonious landlord-tenant relationship); ferry and transportation service; and the conduct of many mercy missions.

As President, Magsaysay was further able to extend these principles to the entire sphere of the public administration. Perhaps to the extreme of undermining the morale of some of his cabinet members and lesser governmental officials, he relieved officials ruthlessly, no matter what their social position or rank. He prosecuted corruption wherever he found it. In some cases he incurred the criticism that he had been overhasty and arbitrary in his action, but the people recognized what he was doing and applauded the motive.

On the governmental level he further stole the thunder from the Communists' slogans, like "land for the landless" and "equality for all." Countering each of the CPP rallying cries, he continued the far-reaching economic and sociological programs of the Defense Department. Where the fulfillment of the Communist promises were *years* away, Magsaysay offered the people something *tangible* and *immediate*.

He offered land to the reformed Huks

and landless peasants. He backed this up with government loans to aid them over the rough initial period of becoming independent farmers. A commission was appointed to arbitrate the tenant-landlord problems. New farm settlements were established in the jungles, supported by government funds, made up of ex-Communists and peasants from the congested areas. He required the armed forces, when they were not fighting, to build such public works as bridges, barrio roads, wells, and school houses. Aids to small businesses and farmers were established, such as the Land Tenancy Commission, Agricultural Credit and Cooperative Financing Association, and the Farmer's Cooperative Marketing Association. He outlawed the Communist Party. And to counter Communist charges, he did his best to ensure that all elections were free and honest. "Positive Nationalism" was his answer to the distorted brand of Red nationalism.

Conclusion

So much had the climate of communism changed in the Philippines when Magsaysay met his tragic end, that his death certainly marked the end of an era. It is not meant to imply that Magsaysay fought this battle singlehandedly. It was a national *democratic* revolution, the likes of which have seldom been seen before, in which the entire Filipino population took part. Never before in the history of Asia has militant communism been beaten so decisively.

MOVING?

If you are moving, please notify the MILITARY REVIEW, Fort Leavenworth, Kansas, of your change of address. Be sure to include your name, *old* address, and *new* address.

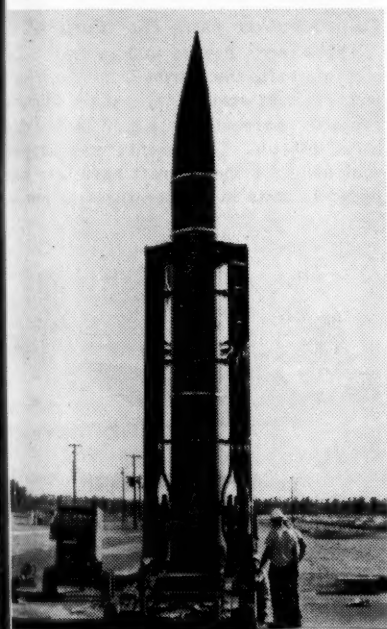
MILITARY NOTES

AROUND THE WORLD

UNITED STATES

'Pershing' Fired Successfully

The Army's highly mobile ballistic missile, the *Pershing* (MR, Mar 1960, p 68),



US Army Photo

Highly mobile *Pershing*

performed perfectly in initial firing tests conducted at the Atlantic Missile Range recently. The *Pershing* is a solid propellant ballistic missile designed as a successor to the liquid fuel *Redstone* now deployed with troops in the field. Now in the research and development stage, the *Pershing* is the Army's newest and longest range surface-to-surface missile. It is air transportable and can be moved to an unprepared site, erected, and launched in a matter of minutes. Nominal range of the new missile is up to 300 miles. It has an inertial guidance system and a nuclear warhead capability.—News item.

Helicopterborne Radiological Survey

Improved radiological survey methods for detecting ground contamination from radioactive fallout have been developed by the Army. Said to be more effective than the collection of data from low-flying aircraft, the new technique employs an instrument lowered from a hovering helicopter. The instrument is mounted on a tripod which holds it a constant three feet off the ground and its intensity readings are recorded on instruments in helicopters. This procedure permits the helicopter to operate up to 2,000 feet above the surface.—News item.

'Lacrosse' Troop Firings

The Army's *Lacrosse* close support missile (MR, Nov 1959, p 84) has undergone the first troop firing tests during recent weeks at McGregor Range, New Mexico. The 5th Missile Battalion, 42d Artillery,



US Army Photo

Lacrosse crewmen prepare to fire

fired the weapon as a climax to eight months of intensive training. The *Lacrosse* is a solid propellant, 19-foot missile that can be fired from a launcher mounted on a 2½-ton truck. It is reported to have a range of approximately 19 miles. Recent tests of the weapon by a joint United States-Canadian team at Fort Churchill, Manitoba, have evaluated its suitability for employment in the Arctic.

Plans announced earlier called for the training and equipping of seven *Lacrosse* battalions this year. Six battalions have been activated to date, of which two currently are being deployed in Germany. —News item.

ROTC Graduates To Duty

A total of approximately 12,500 Reserve Officers' Training Corps (ROTC) graduates will be called to duty as junior officers during Fiscal Year 1961. About 7,500 will serve on two-year, three-year, and distinguished military graduate appointments. Nearly 5,000 will be given six months' active duty training. —News item.

Miniature Radiation Detector

A miniature radiation detector small enough to go into the tip of a hypodermic needle has been developed by a commercial agency. It is described as rugged, accurate, and 1,000 times faster than detectors now in use. Possible uses for the miniature device include medical research and cancer treatment, space exploration, and industrial processes. —News item.

Cold Weather Tests For 'Caribou'

The Army's newest and largest transport aircraft, the *Caribou*, has been subjected to cold weather tests at the Climatic Projects Laboratory, Eglin Air Force Base, Florida. Components and support equipment for the aircraft have been subjected to tests in temperatures as low as



Largest Army transport

65 degrees below zero. The first production models of the 32-passenger aircraft were accepted by the Army from the manufacturer earlier this year. The initial order was for five planes, but unofficial reports indicate that several may be purchased in Fiscal Year 1961. —News item.

Nuclear Power Source

Electric energy adequate to operate an unmanned weather station in the Arctic for periods of up to two years can be provided by a small compact nuclear power unit. Another in the SNAP (System of Nuclear Auxiliary Power) series being developed under auspices of the Atomic Energy Commission (MR, Jun 1959, p 77), the unit is cylindrical in shape, eight feet high, and 32 inches in diameter. It employs approximately one pound of strontium 90 surrounded by 72 thermocouples.



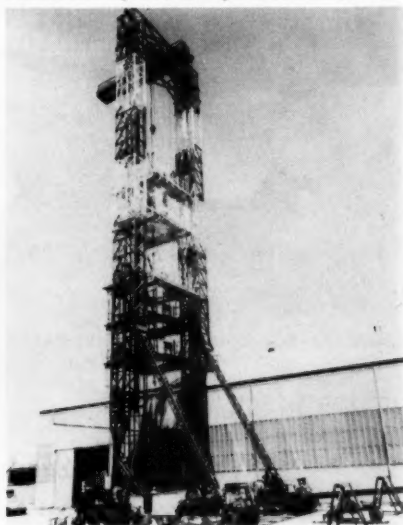
Nuclear-powered weather station

The thermocouples convert the heat produced by the radioactive fuel directly into electricity.—News item.

Missile Tower On Wheels

The United States Army Engineers have developed a portable missile service tower believed to be the tallest and heaviest pneumatic tire-mounted structure in the country. The tower is 151 feet tall, equivalent to a 15-story building. It weighs 350,000 pounds and is designed to service missiles of the Redstone or Jupiter classes,

or any missile up to 136 feet tall. The new structure is mounted on two 6-wheeled base trailers. The rearmost wheels are driven by an electric motor and the front wheels are hydraulically steered. Previous



US Army Photo

Missile service tower

missile towers have been either fixed or rail-mounted.

Two crane hooks, operating from the "hammerhead" top of the tower, pick up the missile and set it on its launcher. Six adjustable platforms are provided for use by engineers and scientists while preparing the missile for flight. The tower has two elevators, a complete intercom system, and a "panic button." The "panic button" can be controlled from the tower or from the control bunker. When activated the tower lowers its wheels to the ground, slides the platforms from around the missile, and backs away from the launcher. This feature is designed to protect personnel and equipment from the danger of fire and explosion during fueling operations.—News item.

'Little John' Production



Little John rocket

The Army has awarded a contract for initial production of airframe components for the *Little John* surface-to-surface rocket system. The newest and most advanced free flight rocket in the Army's arsenal, the *Little John* has undergone extensive testing at the White Sands Missile Range. Tests conducted at Fort Bragg, North Carolina, during parachute operations attested to the ruggedness of the equipment. Recently, a nine-man crew emplaced, fired, and displaced the entire system in 10 minutes employing two *H-34* (*Choctaw*) helicopters under simulated battlefield conditions. In a similar test at Aberdeen Proving Grounds, the rocket launcher and crew were transported internally in a *YHC-1A* helicopter (MR, Mar 1960, p 74), emplaced, fired, and displaced in less than 12 minutes.

The *Little John* measures 14 feet in length, is 12½ inches in diameter, and capable of delivering either a conventional

or nuclear warhead. The system is simple and reliable and its lightweight launcher and ground equipment afford high mobility. Unofficial information indicates that the weapon is a solid propellant, spin-stabilized rocket with a range of more than 10 miles.—News item.

'Quarpel'

A new experimental water-repellent finish for combat clothing that has successfully withstood a continuous one-inch per hour downpour for seven days has been developed by the Army Quartermaster. Called *Quarpel*, the new finish is oil resistant and can be laundered or dry-cleaned and still remain water-repellent, vapor permeable, and comfortable for the life of the garment. *Quarpel* has been so successful in tests that research technologists say it eventually may have wide use in commercial rainproofing of clothing as well as for Army combat clothing.—News release.

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'Hawk' Kills An 'Honest John'

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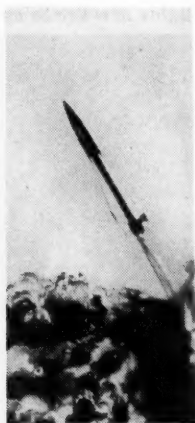
THE APPROACH . . .



CLOSER . . .



DESTRUCTION

HAWK
IN PURSUIT

US Army Photos

A Hawk air defense missile (MR, Jul 1959, p 70), rocketed four miles in 15 seconds to intercept and destroy successfully an *Honest John* missile at a point $1\frac{1}{2}$ miles above the earth in a recent test at the White Sands Missile Range. Designed to complement the *Nike Ajax* and *Nike Hercules* air defense weapons, the *Hawk* is unique because of its ability to engage extremely low-flying targets and its capability of maintaining a rapid rate of fire. The *Hawk* is 16.8 feet in length and 14 inches in diameter. The *Honest John* target is an operational free-flight artillery rocket normally fired from a self-propelled launcher. It is 27 feet long and 30 inches in diameter.

In previous tests the *Hawk* has scored a direct hit on an *XQ5* drone traveling at 1,400 miles per hour and at an altitude in excess of 30,000 feet, and has engaged an

F80 drone aircraft successfully at treetop level. This test demonstrated the feasibility of destroying a missile in flight with another missile.—News item.

Ships' Turn Signals

The USNS *Golden Eagle* has been fitted with directional turn signals similar to those commonly used on automobiles. The *Golden Eagle's* signals consist of 28 one hundred-watt bulbs enclosed in arrow-shaped amber covers. They were installed on an experimental basis following the evaluation of illuminated turn signals on Dutch craft in the English Channel.

Recent increases in the collision rate between ships working in close waters have been attributed to misunderstood whistle signals. Electric turn signals to augment the whistle signals are proposed as a solution to this problem.—News item.

Infrared Applications

Standard 18-inch and 30-inch searchlights now are being used at the US Army



US Army Photo

Standard 18-inch infrared searchlight

Infantry School, Fort Benning, Georgia, to provide infrared illumination for night



US Army Photo

Map reading with infrared light

operations. An infrared filter converts the searchlight beam to light not visible to

the unaided eye, but which permits good observation by a viewer equipped with a metascope. The metascope can also be used in conjunction with a small, compact infrared flashlight for map reading or other visual operations in what appears to the unaided eye to be total darkness.—News item.

'Sno-Trains' In Arctic

The effectiveness of the *Sno-Train* principle (MR, Jul 1956, p 65) for the transportation of bulk cargo in arctic operations



US Army Photo

Operational *Sno-Train*

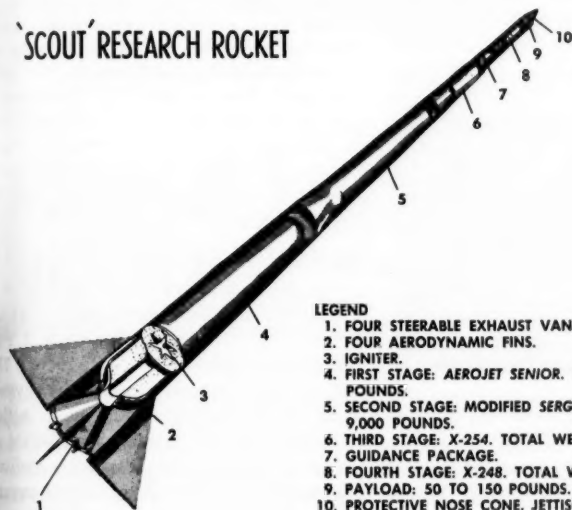
currently is being demonstrated in Greenland. Low ground pressure afforded by the 4-foot-wide, 9½-foot-high tires provides good oversnow flotation.—News release.

Rise In Education Level

A year-end report on the Army personnel structure indicates that the educational level of both officer and enlisted personnel continued to rise during 1955. More than three-fourths of the Regular Army commissioned officers have a college degree. Nearly 60 percent of the Regular Army enlisted men are high school graduates or the equivalent.—Official release

'Scout' Component Tested

'SCOUT' RESEARCH ROCKET



LEGEND

1. FOUR STEERABLE EXHAUST VANES.
2. FOUR AERODYNAMIC FINNS.
3. IGNITER.
4. FIRST STAGE: AEROJET SENIOR. TOTAL WEIGHT 23,560 POUNDS.
5. SECOND STAGE: MODIFIED SERGEANT. TOTAL WEIGHT OVER 9,000 POUNDS.
6. THIRD STAGE: X-254. TOTAL WEIGHT 2,380 POUNDS.
7. GUIDANCE PACKAGE.
8. FOURTH STAGE: X-248. TOTAL WEIGHT 711 POUNDS.
9. PAYLOAD: 50 TO 150 POUNDS.
10. PROTECTIVE NOSE CONE, JETTISONS BEFORE IGNITION OF FINAL STAGE.

The inexpensive X-248 rocket engine, which ultimately is to become the fourth stage of the economical Scout space research rocket (MR, Sep 1959, p 74), was launched successfully from the Wallops Island, Virginia, test center recently. The second stage of the Scout will be a 9,000-pound plus version of the Sergeant. The vehicle is being designed to meet several objectives including: to place a payload of 150 pounds in orbit at 300 miles, to orbit 100 pounds at 500 miles, or to lift a 50-pound payload in a vertical probe to a distance of 7,000 miles from the earth.

Estimated cost of each Scout missile is \$500,000—far less than other vehicles with the same capability. The first Scout is to be launched about June of this year according to unofficial reports.

The test vehicle used in the recent firing was a Javelin missile made up of the solid propellant X-258, an Honest John, and two Nike rockets. It attained an alti-

tude of approximately 560 miles in an 18-minute flight.—News item.

Portable Oxygen Unit

A compact unit capable of producing an almost unlimited supply of oxygen from the atmosphere has been designed by a United States manufacturer. The unit is completely portable and operates on ordinary house current or field power source. The prototype is approximately two feet square and weighs 150 pounds. Flexible internal design permits fabrication in almost any shape and size. The device draws air from the atmosphere, filters out contaminants, and extracts oxygen and delivers it at approximately five pounds per square inch pressure. The invention is expected to have wide application in ambulances and field installations requiring a portable source of uncontaminated oxygen.—Commercial release.

New Communications Link

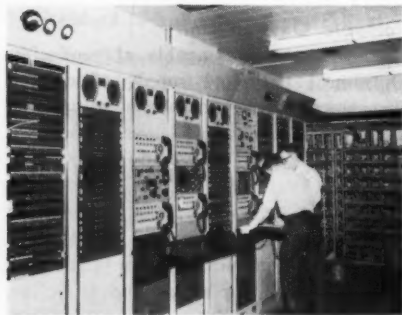
The Army's newest and most modern strategic communications relay link has been dedicated formally at Fort Leavenworth, Kansas. It is the second of three



US Army Photo

Midwest Relay Communications Center

major communications centers scheduled for construction in the Continental United States. One at Davis, California, began operation in 1956 and a third is being completed at Fort Detrick, Maryland. The 10-million-dollar installation at Fort Leavenworth, designated the Midwest Relay



US Army Photo

Relay facilities control panel

Communications Center, is capable of handling 200,000 messages daily. It employs completely automatic message switching in lieu of manual tape relay.—News release.

Radar Relay Tests

Radar data is being passed to operational equipment many miles away in one of the first experiments in this country involving the relay of radar data by microwave signal. Experiments are being conducted from a relay site operated by the 1st Missile Battalion, 43d Artillery, on mile-high Mica Peak in eastern Washington. Signals are relayed 30 miles to the Army-Air Force air defense command post at Geiger Field.—News item.

Electronic Test Facility

The electronic environmental test facility planned for early construction at the US Army Electronic Proving Ground, Fort Huachuca, Arizona (MR, Jan 1960, p 73), will provide an electromagnetic environment similar to that found in a tactical situation. On the modern battlefield as many as 20,000 radio-frequency emitters may be found in operation in a 60-square-mile area. This density of equipment poses serious problems in signal interference. The environmental test facility will provide data useful in the establishment of design criteria for new equipment, and for reducing existing and predicting future interference. Data required for frequency coordination and allocation, which will be useful in development of operational concepts, also will be produced. The actual test area will extend from Fort Huachuca along the Arizona-Mexico border to include the Yuma Test Station.—News item.

Reserve And National Guard Titles

The abbreviations ARNG (Army National Guard) and USAR (United States Army Reserve) are being eliminated from unit designations in furtherance of the "One Army concept." Immediately affected are the titles of the 14 Active Army corps that administer Army Reserve affairs in the Continental United States Army areas.—News item.

JAPAN

New Destroyers



The Akizuki, one of Japan's new destroyers

Two 2,350-ton destroyers—the largest built in Japan since World War II—are scheduled to join the Japanese Fleet soon. These vessels will have a 32-knot cruising speed. In addition, plans are being made for the construction of two or three helicopter carriers as nuclei for hunter-killer forces. These carriers will operate in conjunction with ground-based reconnaissance aircraft.—News item.

Kappa' Research Rocket

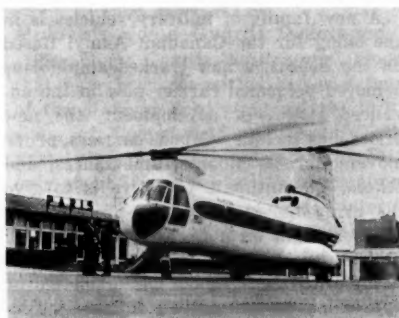
The Tokyo University Industrial Institute's Kappa research rocket has reached the test stage. Initial firings of the first-stage booster were scheduled for the latter part of March. The two-stage rocket is slightly over 10 meters in length, weighs 2.2 tons, and in a planned configuration is expected to reach altitudes up to 100 kilometers.—News item.

Naval Strength Gains

Japan's Maritime Self-Defense Force comprises the third largest naval force in Asia. It is exceeded only by the navies of the Republic of China and Communist China. The Japanese force concentrates on antisubmarine vessels suitable for defense of the country's 16,214 miles of coastline. Strength of the force was placed at 208 vessels with an over-all tonnage of 14,576 as of 1 March of this year. Each of the Chinese Fleets is estimated at 150,000 to 160,000 tons.—News item.

Helicopter Production

An agreement has been reached for the production of the Vertol 107 helicopter in Japan. Vertol 107 is the commercial designation for the twin-rotor turbine-



Vertol 107

powered transport helicopter which is being produced for the United States Army as the YHC-1A (MR, Mar 1960, p 74).—News item.

NATO

Nuclear Task Force

The North Atlantic Treaty Organization (NATO) will establish a mobile nuclear-armed task force consisting of troops from the United States, British, and French Armies. Designed for use anywhere in the NATO area where it is militarily or politically necessary, the new force will be equipped with conventional as well as nuclear weapons. It will be made up of one battalion from each of the contributing countries under a single commander and staff. These units will be pulled out of their national forces periodically for training, but at other times will remain in place.

International air and naval forces will be so organized that they can work effectively and promptly with the international task force. The Supreme Allied Commander, Europe has announced that organization of the force will be accomplished in the course of the next year. Two additional countries, yet unidentified, will be asked later to contribute a battalion each to the force.—News item.

CANADA

New Army Vehicles

A new family of military vehicles is in the offing for the Canadian Army. Based on the *Bobcat*, a new tracked amphibious armored personnel carrier now in the advanced stages of development, the new series may include weapons carriers, prime movers, missile mounts, ambulances, and others. The ultimate objective is to give the army the mobility and protection it needs to fight on a nuclear battlefield.

Total cost of equipping the Canadian Army with these vehicles is estimated at approximately 200 million dollars. A similar series of vehicles is under development by Great Britain, and action is being taken to coordinate these efforts to produce jointly a single series of vehicles for use by the armed forces of both countries.—News item.

FRANCE

Electronic Jammer

France has announced the development of an electronic jamming device capable of transmitting so many electronic signals on multiple channels that enemy radar-controlled devices are unable to get a fix on their target. Called a *Carcinotron*, the jammer is said to fill the sky with so much electronic interference that defending radar is rendered helpless. It is a small compact unit that can be carried in an aircraft or placed in larger missiles. The *Carcinotron* was developed by a French scientist and is being considered for joint Franco-German production.—News item.

USSR

IRBM Bases

Unofficial sources report that the USSR has 30 intermediate range ballistic missile (IRBM) bases deployed along her borders. Twenty-one of these are located in the Soviet Union facing Western Europe, and eight are deployed on Russian soil in the Far East. The remaining IRBM base is believed to be at Seroc, near Warsaw, Poland. The forward location of this base places it within easy range of targets throughout Western Europe.—News item.

Troop Cuts Announced

Soviet officials have announced a planned release of about 1.2 million men from the country's armed forces. This constitutes approximately a one-third reduction in over-all strength. Russian sources say the cut is already under way and that many recently discharged personnel are now arriving in the virgin lands of Central Asia where they will work as tractor and truck drivers, and combine operators on state farms. Western observers have expressed the opinion that the cut will not materially affect the forces facing NATO and that there will be no effect on the divisions in East Germany, Hungary, and western Russia.—News item.

AUSTRALIA

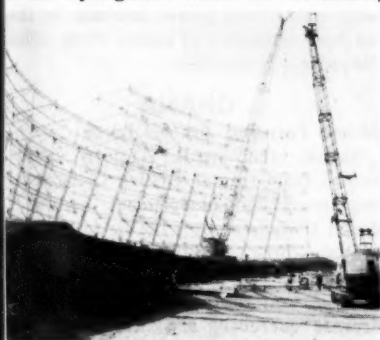
'Pentropic' Divisions

Australia plans to reorganize her regular army divisions along the lines of the United States pentomic division. The first step would be to build two of an eventual three "pentropic" divisions. The first would consist of two-fifths regular soldiers and three-fifths Citizens' Military Forces; the second would be entirely part-time volunteers, while the third would be formed later. Details of the plan are expected to be completed by June 1960.—News item.

GREAT BRITAIN

BMEWS Site In England

The location of the third major radar station in the Ballistic Missile Early Warning System (BMEWS) (MR, Dec 1959, p 71), has been announced by the British Government. The new link in the joint British-United States air defense early warning system will be constructed on the Fylingdales Moor in Yorkshire,



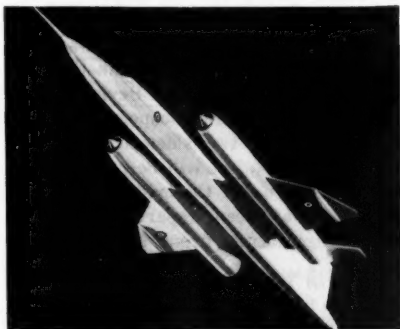
US Army Photo

BMEWS station under construction

England. Two other major radar stations in this system are now under construction at Clear, Alaska, and Thule, Greenland. The principal installation at the British site will be a giant radar screen about 400 feet long and 165 feet high. Construction already has begun on the installations in the Arctic.—News item.

'Bristol 188' Research Plane

The *Bristol 188* is a high-speed research aircraft now under construction in England. Built of welded stainless steel, the *188* will be a single-seat, twin-jet craft that is expected to have a wider range of



Stainless steel research plane

air speeds than any aircraft now flying. It will take off and climb to altitude under its own power as opposed to the air-launching procedure employed by the *X-15*, a current United States high-altitude research aircraft. The *188* is due to begin flying tests this year.—News release.

MALAYA

Malaya's Home Guards Disbanded

The Home Guards, antiterrorist troops that have been committed to the defense of the Malayan people against the incursions of Communist guerrillas for the past 10 years, have been disbanded. With only about 700 armed terrorists remaining in the country, responsibility for internal order is to be turned over to a volunteer territorial army with a planned strength of 15,000 men. At one time more than 8,000 armed and confident terrorists roamed the country; the Home Guards committed against them numbered 250,000 men. The Communists have been reduced by casualties and surrenders. The small number remaining has been driven into the Thailand-Malaya border area.—News item.

TURKEY

Intercontinental Bridge

The world's first intercontinental bridge is to be constructed across the Bosphorus near Istanbul. The bridge will be of the suspension type with a between-towers span of 3,091 feet. Two additional spans will measure 681 feet each for a total length of 4,453 feet. It will link Ortakoy in European Turkey with Beylerbeyi on the Asiatic side of the Bosphorus via four traffic lanes and two sidewalks. Vertical clearance of 164 feet will be provided for ships passing under the bridge. Plans for the project have been prepared by a United States engineering firm.—News release.

Women In The Service

Women first enrolled in a military academy in Turkey in October 1955 when war college and naval academy authorities discovered that there was nothing in their charters which excluded them. Since that time a woman has graduated from the Military School of Medicine in Ankara, and in 1957 entered the army as a second lieutenant. One woman is now a combat jet pilot and currently is engaged in teaching men to fly.—News item.

BELGIUM

Permanently Creased Uniforms

A complete regiment of the Belgian Army has been outfitted with permanently creased uniforms. Tests are being conducted with a view to making permanent creasing standard in all uniforms. The military services of several other countries, including the United States, have indicated an interest in the process which is being widely used commercially to crease wool fabric permanently.—News item.

COMMUNIST CHINA

Rocket Bases In China

Nationalist Chinese authorities in Taipei have reported that Communist China is building a string of rocket bases along the coast of the Chinese mainland.—News item.

Hydroelectric Power Development

Communist China's crash construction program to provide electric power for her growing industrial complexes is now bearing fruit. Today, China produces 12 times the electric power produced 10 years ago. She is reported to hold the 11th place among countries of the world in electric power output.

Scores of hydroelectric power stations are being planned and built, many of them of one million-kilowatt capacity. Currently, machinery and equipment are being installed at the 600,000-kilowatt station on the Sinan River in Chekiang Province. Concrete is being poured for the 360,000-kilowatt plant on the Fuchun River in the same region. In Hunan Province a 400,000-kilowatt plant is being constructed on the Tzushui River. Even Lhasa, high on the Tibetan Plateau, will be provided power from a new 700,000-kilowatt station. In addition to the huge hydroelectric plants, smaller steam power stations are being built. Total power increase for 1959 has been estimated at nearly three million kilowatts.—News item.

GHANA

Ghana Forming An Air Force

Ghana, the small African country formed from former British Colonies and proclaimed an independent nation in March 1957, is reported to be forming her own air force. Israeli instructors are to be used to staff a flying school being set up in Accra, the capital. Twelve trainer aircraft currently are being purchased, and ground and air training of cadets is to begin in the very near future.

A 28-million-dollar airbase is planned for completion by September 1961 and will provide facilities for the two jet fighter squadrons of 16 aircraft each which are contemplated. The airfield will have housing facilities for 1,000 airmen and the necessary buildings for technical support of the force. A 6,000-foot runway will be provided.—News item.

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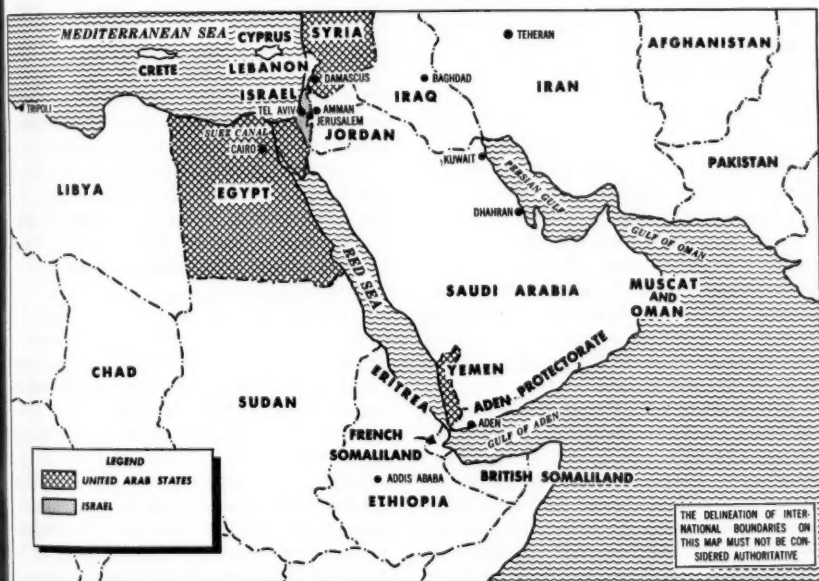
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MILITARY DIGESTS

THE MIDDLE EAST



The Middle East is perhaps the most conspicuous of all the areas of the world harboring tensions of international interest. The Arab-Israeli conflict, the influence of Nasser and Kassem, the rise of Arab nationalism, and the evidence of Communist efforts to infiltrate the region create problems in international strategy. The digests which follow present the authors' opinions on these problems and their importance to the security of the West.—Editor.

ISRAEL

The First Decade

Translated and digested by the MILITARY REVIEW from a copyrighted article by Charles Max Goussot in "Revue Militaire d'Information" (France) November 1959.

From its inception in 1948 the State of Israel has grown in economic, political, and cultural stature despite continuous external pressures and demanding internal problems. Here is a concise account of the creation of the country, its development, and its prospects for the future.—Editor.

THE Zionist movement which initiated the return of the Jews to Palestine began toward the end of the 19th century.

Helped by people of the same faith who were powerful figures in the world of finance, particularly Baron Edmund Rothchild, about 60,000 Jews were settled on uncultivated land purchased from the Arabs in Palestine prior to the end of the First World War.

On 2 November 1917 Lord Balfour, the Prime Minister of Great Britain, solemnly promised in the name of England to establish a "national home for the Jewish people" in Palestine as soon as the country was freed from the Turkish yoke. France and Italy joined in this promise.

This declaration gave rise to great enthusiasm among the Jews. The term "Jewish home" was, however, very vague. What would it be like? How many people would it be capable of receiving? Above all, what would their status be as opposed to the population of the country? There were many other questions that had not been broached. In other words, the idea of the Jewish homeland constituted a promise which meant and solved nothing as has been demonstrated by the events that followed.

With the defeat of the Ottoman Empire certain countries that had been torn from Turkey were placed under English and French mandates. Iraq went to England,

and Syria and Lebanon went to France. But England also claimed Palestine which had always formed a bloc with Syria. This claim was based upon the need to supervise the implementation of the Balfour Declaration in the establishment of a Jewish homeland.

In granting this mandate to England, the League of Nations enjoined her "to bring the idea of a Jewish homeland into factual being, to facilitate Jewish immigration, and to encourage close settlement on the land."

The Jews wanted to live on good terms with the Arabs, but the Arabian leaders, led by the Great Mufti of Jerusalem, provoked unrest. Riots broke out in 1921, 1929, and on a large scale in 1936.

Under the influence of their specialists for Arabian affairs (the famous T. E. Lawrence in particular), the English had cherished the idea of a great Arabian empire in the Middle East which would be under their influence. In an effort not to displease the Arabs they took measures aimed at restraining Jewish immigration.

The immigration of the Jews was held back until after 1945 when it became necessary to provide shelter for those who had escaped Hitler's extermination camps.

Feeling abandoned, the Jews of Palestine resolved to defend themselves against incessant harassment by the Arabs. Mutual acts of violence resulted and the con-

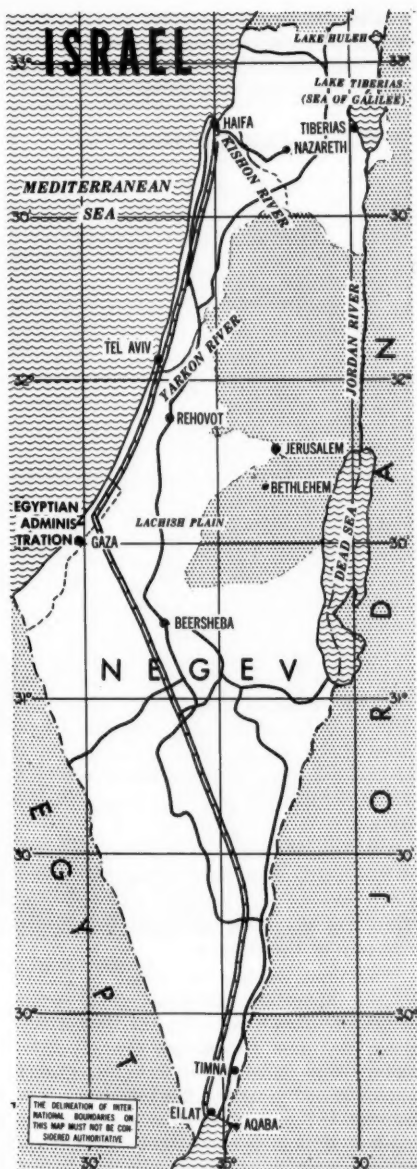
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conflict became so serious that England had to submit the question to the United Nations. A commission was appointed and, on 29 November 1947, the United Nations Assembly approved the report of that commission which proposed the partition of Palestine into two states—one Jewish, the other Arabian. The Jews accepted immediately, although this partition was not to their complete satisfaction. The Arabs rejected the proposal and announced that they would oppose it by force. Bloody unrest ensued in the whole country. In February 1948 the Arabian army of liberation invaded the northern part of the country, and in March and April furious fighting took place in the north and in the mountains around Jerusalem.

England, who had not intervened in the conflict, decided that her mandates would end on 15 May 1948. It was then that the Jewish provisional government, which had been formed as a result of the United Nations decision regarding Palestine, proclaimed the new State of Israel dating from 14 May 1948.

In reply, the armies of Egypt, Trans-Jordan, Syria, Iraq, and Lebanon invaded the country in the north, east, and south, and the Arab leaders announced a war of extermination. In four weeks the *Haganah*, a defensive formation of Jewish volunteers, succeeded in routing the invaders. On 11 June, on the United Nations recommendation, a truce was reached. Finally, between February and July 1949, a series of armistice agreements were concluded under the auspices of the United Nations between Israel and her immediate neighbors. The courage of a young people who, at the time, were less than one million had triumphed over a coalition which totaled 35 million.

Thus Israel was born in the midst of a hostile world—a world which still remains hostile. It is, nevertheless, in this climate of perpetual insecurity that the young state organized itself; fertilized its soil; created industries; and welcomed,



settled, and adjusted nearly one million immigrants, most of whom arrived with little material wealth and totally unprepared for the task that awaited them.

IMMIGRATION	
<i>Year</i>	<i>Persons</i>
1948 -----	101,828
1949 -----	239,576
1950 -----	170,249
1951 -----	175,095
1952 -----	24,369
1953 -----	11,326
1954 -----	18,370
1955 -----	37,478
1956 -----	56,234
1957 -----	72,634
1958 -----	27,287
Total immigration from 15 May 1948 to 31 December 1958 -----	
	934,446

Geography

The country extends in an irregular strip 420 kilometers long, stretching from the hills of Galilee in the north to the harbor of Eilat on the Red Sea. Its widest point is 112 kilometers in the area south of the Dead Sea. In some places north of Tel Aviv the width is less than 20 kilometers.

The Negev Desert in the south forms a vast triangle with its base at the hills of Beersheba and its point on the Red Sea. This area plays an important role in the economy of the country.

The total surface of Israel is 20,241 square kilometers. However, as a result of the partition imposed by the United Nations, the land boundaries are 951 kilometers long to which must be added 254 kilometers of coastline. This disproportion between the surface and the length of the borders does not make military defense an easy task.

With the exception of the Haifa Bay, the coast is regular and lined by dunes. A coastal plain stretches along 187 kilometers, broadening north and south of Haifa and south of Tel Aviv. The mountains extend over 300 kilometers from Lebanon to Sinai and form a backbone with an average altitude of 700 meters. The highest peak is Mount Merone in Upper Galilee.

Two coastal rivers—the Yarkon, near Tel Aviv and the Kishon at Haifa—and a great river in the east, the Jordan, 118 kilometers of which lie in Israeli territory, are the essential parts of the hydrographic net of the country. The Jordan springs from the foot of the anti-Lebanon range, crosses the small lake of Huleh (10 meters altitude) then, after several kilometers, it runs down into a deep crevasse. It crosses through Lake Tiberias (Sea of Galilee), 198 meters below sea level, and joins the Dead Sea, 392 meters below sea level. The Dead Sea is the lowest point on the surface of the earth.

Political Organization

Israel does not yet have a written constitution, but there are a series of organic laws which eventually will form the framework of a constitution. In the meantime, Israel has an essentially democratic government which is composed of the following:

The President of the State is elected for five years. His role is about the same as that of a French president under the Fourth Republic.

The *Knesset* is a unicameral legislative assembly of 120 deputies elected by a system of proportional representation on the national level. The citizens vote for national lists that are submitted by all the parties. The decisions of the assembly can be repealed or modified only by the assembly itself. The debates, which are public, take place in Hebrew and are translated for the Arab deputies.

The Cabinet is composed of 15 ministers

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who are responsible to the assembly. One is a minister without portfolio.

The bills are prepared by the Minister of Justice and presented by the minister who is concerned with the matter at hand. A bill requires three readings before it becomes law as amended. It is then pub-

of Israel will be open for Jewish immigration and for the Ingathering of the Exiles. . . ." The Law of the Return provides specifically that every Jew has a right to be in Israel.

At the last census in January 1959 the total population of Israel was 2,031,672,



The Knesset, Israel's parliament

lished in the "Book of Laws" after having been signed by the Prime Minister, the minister charged with the implementation, and countersigned by the President of the State.

Immigration and Population

The Declaration of the Establishment of the State of Israel declares: "The State

comprising 1,810,148 Jews and 221,524 non-Jews.

The Jewish immigrants come from many different countries and speak different languages. Many do not know Hebrew. Most of them have no resources and many have no profession that can be used in Israel.

It is understandable that their assimila-

tion poses innumerable problems to the government including instruction, lodging, and integration into the national economy. The leaders of the country have strived to develop the two essential sectors of the economy—agriculture and industry—so that the newly arrived immigrants can find employment, and feel themselves to be free citizens of a homeland that they have helped forge.

It is, therefore, appropriate to examine

the former masters of Palestine, lacked the necessary technical knowledge and did not make the effort.

The Israeli Government has called upon many specialists in meteorology, hydrology, ecology, and agronomy to assist in land development. Streams were used to their maximum, spring water was collected and conveyed to the land, and drilling resulted in the finding of new water sources. The possibility of desalting sea water was

AGRICULTURAL EXPORT

<i>Products</i>	<i>Quantity</i>	<i>Value in Dollars</i>
Citrus fruits -----	7,855,324 cases	39,134,600
Citrus fruit in gift parcels -----	308 tons	66,887
Other fresh fruit -----	1,745 tons	359,091
Groundnuts -----	4,447 tons	1,449,293
Eggs -----	8,047,000 units	306,715
Honey -----	18 tons	6,822
Vegetables -----	46 tons	16,929
Liverpaste -----	5.9 tons	46,765
Flowers, bulbs, and seed -----		87,760
Poultry -----	393,020 units	80,744
Total agricultural export in 1955-56		41,555,606

first the efforts that have been made to develop agriculture and industry.

Agriculture

Before the arrival of the first Jewish immigrants agriculture was primitive and the greatest part of the soil was a desert. Arable and even fertile land is not lacking in Israel, but there is insufficient water. There are about 55 to 65 rainy days per year in the north and central part of the country and from 10 to 30 in the Negev. Precipitation is 1.080 millimeters in Upper Galilee, 650 to 750 in Haifa, 500 to 600 in Tel Aviv and Jerusalem, and only 20 millimeters in the southern part of the Negev. Considering the drying effect of the desert winds, great efforts are necessary to render the land productive. The Arabs, who were

studied and consideration was given to using it directly for cultivation of certain plants. River water was channeled great distances to regions previously uncultivated.

Irrigation ditches have drained the water from a swamp around Lake Huleh and 6,000 hectares of cultivable soil have been gained for the production of rice, sugar cane, and cotton.

The Lachish Plain is a land strip 50 kilometers wide that stretches from the Mediterranean Sea to Jordan. In biblical times this was a true garden. The Babylonians ravaged the country in 587 B. C. and since then it has remained a desert. New settlers from Morocco, Kurdistan, Egypt, Hungary, and Romania who had

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Pitchfork and rifle

a complete ignorance of agriculture were installed there. Experts were assigned to them to furnish advice on agriculture and irrigation. In six years the Lachish area became unrecognizable. At the present time, 10,300 hectares of the 20,000 that

make up the region are cultivated. Fourteen thousand people have been settled there, 50 new villages have been built, 2,500 houses have been constructed, and 3,000 are in the process of being constructed. The once sterile valleys now pro-

duce cotton and peanuts. The main city of this region is Kiryat Gat, a town of 9,000 inhabitants, where industries based on agricultural products have developed.

The success of this operation has led to the planning of similar projects, which are now in the process of being realized, particularly in the mountains of Judea.

The most spectacular results have been obtained in the Negev. This area has desert climate: torrid heat during the day, rare rainfall, and parching winds. Nevertheless, there is evidence of a flourishing agriculture at the time of the Babylonians. The soil is fertile loam. Only water is lacking. Experts were sent into the country to study the best method of using available water. Windbreaks of trees were planted and two pipelines were constructed which permitted the channeling of the waters of the Yarkon to the northern part of the Negev.

As a result, cotton and sugar beets have been introduced into the region. Twenty-seven thousand fruit trees have been planted. In the course of the first six months of 1958, 4.5 million liters of milk and more than eight million eggs were produced. The population of Beersheba, its capital, has grown from 3,000 in 1948 to 25,000 in 1958.

An even more grandiose project foresees the diversion of the Jordan waters at the mouth of Lake Huleh. Part of it would be channeled into Lake Tiberias, where a 200-meter fall would be used to generate electricity. The rest would be diverted by pipeline to the Negev to fertilize new soil. Arab opposition prevents this project from being realized.

At the present time the agricultural production of Israel is sufficient to satisfy 75 percent of her needs. In addition, many products, particularly citrus fruit, are being exported. These exports bring in much needed foreign currency. The export of agricultural products is now in excess of 50 million dollars.

In Israel, about 80 percent of the arable land is the property of the Jewish National Fund. Nationalization of the soil was necessary to avoid speculation and prevent the forming of large individual real estate holdings which would have been an obstacle to the settlement of new immigrants on an equal footing with earlier arrivals.

The land is allotted to whoever asks for it and a token rent perpetuates the property rights of the state. The contract runs for 49 years and is renewable for the same period.

Agricultural villages have developed in the form of collectives and cooperatives.

The *kibbutz* is an absolute collective: property is collectively owned and the work is organized collectively. The settlers give their labor and in return they receive food, clothing, education for their children, and social assistance. Although they are essentially agricultural, some *kibbutzim* have industrial enterprises. The population of the *kibbutzim* varies from 60 to 2,000 people.

The *moshav ovdim* is a cooperative type village. Small holders with their families work their land themselves. However, the produce is sold through a common cooperative and purchases are made collectively. Part of the agricultural equipment of the village is owned collectively.

Lastly, there also exist agricultural operations of the "small property" type in which the individual independently operates his own farm.

Industry

The establishment of industry in a country assumes the presence of raw materials, principally ground deposits. Although small, Israel is not without natural resources.

Low-grade iron ore deposits in the northern part of the country are being exploited. There is also some ore in the Negev which is of a better grade, but its exploitation has not commenced. There is high-grade

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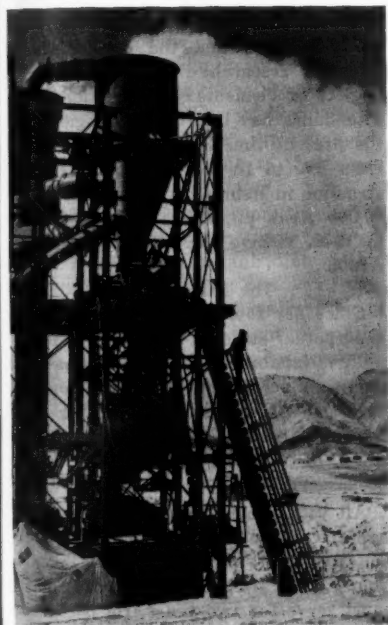
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copper and manganese at Timna at the southern point of the Negev, and chrome is found at the southern extremity of the Dead Sea.

Great phosphate deposits that contain uranium salt also have been discovered in this area.

This region also furnishes glass sand, clay, feldspar, and gypsum for cement. Some oil has been discovered in the north-



A phosphate plant in the Negev

ern Negev. The production is now only 800,000 tons per year but prospecting continues.

The principal source of mineral wealth of the country is the Dead Sea. Its waters contain an abundance of magnesium chloride, sodium, calcium, and potassium which are the basis of an extensive chemical industry.

Some of the more significant industrial

operations of the young state include a steel town at Saint-Jean-d'Acre which produces sheet metal for construction work and steel pipes. Copper plants are operating at Timna which process 8,000 tons of copper per year from ores mined in that area. A large textile concern is in production at Kfarata near Haifa.

There is an assembly plant for motor vehicles and a factory for chemical products at Haifa.

The diamond society of Tel Aviv cuts and polishes imported rough diamonds which then are re-exported.

An American-Israeli paper mill operates at Hadera. In addition there are several cement factories, pharmaceutical factories, and food processing plants.

Industrial production has tripled its volume since 1949. Approximately 1,500 new products have been manufactured. Export has gone from 28 million dollars in 1949 to 135 million in 1957.

Cultural Features of the Country

Since 1948, 1,700 kilometers of roads have been constructed or modernized, including the asphalt road that links Beersheba to the port city of Eilat across the Negev.

About 403 kilometers of new rail tracks have been put into service, including the line that links Beersheba with the northern part of the country.

A large airport has been built at Lydda and auxiliary airfields at Haifa and Eilat.

The harbor of Eilat has been constructed on the Red Sea. It is estimated that its annual traffic will reach 700,000 tons in the near future. From Eilat a pipeline relays oil to Haifa. A new rail line to the north is being planned. The pipeline, highway, and rail network constitute a route across the Negev which can substitute partially for the Suez Canal in case the latter is blockaded.

The merchant marine which had 10 vessels with a 14,000 total tonnage in 1948, now has 34 with 192,600 tons capacity.

Scientific Research

In order to accomplish successfully the task of equipping and modernizing an area that had been allowed to lie dormant for so many centuries, the young state needed a team of scholars, scientists, and technicians. Well before the creation of the state and as Jews settled in Palestine, research centers and institutions, of advanced studies were created. After the establishment of the state in 1948 these were brought up to date, their efforts coordinated and they were provided with more modern facilities.

There are three principal establishments for research and higher studies. These include:

The Weizmann Institute of Science (named after the first president of the state) at Rehovot which explores applied mathematics, nuclear physics, electronics, photochemistry and plant genetics.

The Hebrew University of Jerusalem consists mainly of a science faculty, a school for the study of medicine, and a faculty for agriculture.

The Institute of Technology at Haifa trains engineers or technicians in the fields of mechanics, electricity, chemistry, architecture, agriculture, aeronautics, and metallurgy. The institute also has research laboratories.

The Research Council in Jerusalem is a coordinating body. It also has its own laboratories and testing stations. These facilities are studying desalting of sea water, utilization of solar energy, production of electricity through wind, agriculture, biology, ecology, artificial cloud formation, and petrochemistry.

Other technological facilities are the Israeli Atomic Energy Commission in Tel Aviv, an agricultural research station at Rehovot, and the Department of Sciences of the Defense Ministry.

Literature and archaeology have not been overlooked in a land so rich in ves-

tiges of the past. This cultural effort has borne fruit on the international scene. Israeli scholars are now represented in all the scientific congresses of the world. In 1957, the international congress on nuclear structure was held at the Weizmann Institute.

Israeli experts on agricultural subjects already have been furnished to Burma, Ghana, and Nigeria and this technical aid can but develop further.

This effort at intensifying the training of technicians and the development of scientific research did not result in the neglect of elementary instruction. School attendance has been made obligatory; at the present time 362,000 Jewish children from five to 14 years of age receive instruction in Hebrew in state schools, while 30,000 Arab pupils, as compared to 417 in 1948, receive the same instruction in Arabic.

The Armed Forces

Since her founding, Israel has lived in a perpetual state of insecurity. With two million inhabitants she cannot afford to maintain permanently a great force for defense without hurting her economy. Therefore, it is through judicious organization of the reserves that security must be assured.

All young men from 18 to 26 years of age are subject to active military service for two and one-half years. Likewise, young girls from 18 to 25 years of age must serve for two years. By performing duty in certain services they allow more men to be available for combat duty. After military service the men are incorporated in the reserves until they reach age 49 and women without children remain until they attain the age of 34. The men are called up every year until they are 40 for a period of 31 days; from the age of 40 to 49 years for a two-week period.

The reserves are so organized that they can be called up, equipped, and in combat-readiness within a few days. The effective-

ness of this method was proved during the Sinai Campaign.

The country is divided into three military area commands, North, Center, and South. A common general staff directs the ground, naval, and air forces. The chief of staff has under his orders the general headquarters, the commander of the navy, the commander of the air force, and the commanders of the three military regions.

Apart from its military role the army is an effective means of welding together the young people who have come from different countries. In the military service they perfect themselves in the Hebrew language, and acquire a common spirit and a feeling of belonging to the Israeli homeland.

In 1952 a special institution, the *Nahal*, "Pioneer Fighting Youth," was created. This is a volunteer organization within the army that young men and women recruits may join. After three months of intensive training they are sent to frontier villages for nine months to work as agricultural workers in the *kibbutzim* while remaining under military discipline. After this stage they can complete their military service or continue to work the land. The majority choose the second solution. Thus while ascertaining an effective border defense, the *Nahal* also forms a bridge between agriculture and the army.

Platform of the West

A brief summary of the accomplishments of Israel during the first decade of her existence indicates that she is a solidly established democratic regime recognized by 63 countries of the world. Nearly one million immigrants have been integrated into the social and economic life of the country. Four hundred and fifty new villages have been established; 203,000 dwellings have been constructed

and a like number are under construction. Approximately 225,000 hectares of arable land have been gained from the desert and waste zones. Agricultural production and industrial production have tripled in volume and value. The export of manufactured products has increased fivefold.

Road and rail nets have been modernized and enlarged. The port of Eilat is opening the road to Africa and Asia. The Eilat-Haifa highway partially substitutes for the Suez Canal.

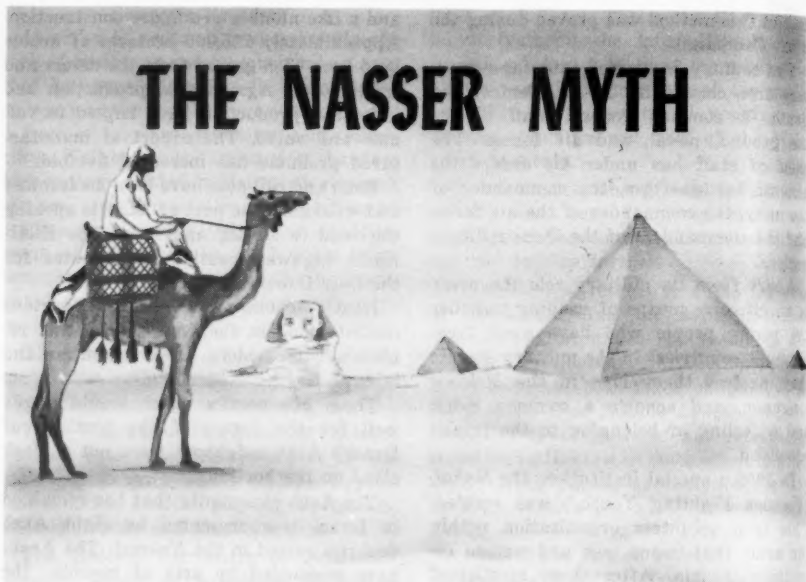
Israeli scholars have made important contributions in the field of scientific research. Ultramodern research centers and laboratories have been built.

These are results which would augur well for the future if the hostility of Israel's Arab neighbors were not a black cloud on the horizon.

The Arab community that has remained in Israel is represented by eight Arab deputies seated in the *Knesset*. The Arabs have responded by acts of boycott: the interdiction of the Suez Canal to Israeli vessels and to merchandise consigned to or leaving Israel; and by closing the land borders which are open to tourists only at the Mandelbaum Gate in Jerusalem.

Certain Arab governments have turned toward the USSR and her satellites to ask for arms. And Moscow—who sees in the Middle East a way into Africa—has responded favorably.

How will it end? Until now Israel has successfully resisted. Will it be the same when her enemies—who are 20 times more numerous—have been provided with powerful modern armament? The West would do well not to neglect this question, for Israel is an entrance for the West to the Middle East not only from the military viewpoint, but also as a place from which the cultural influence of the Western democracies can be reflected on the neighboring countries.



Translated and digested by the MILITARY REVIEW from an article by Pierre Rondot in "Revue de Défense Nationale" (France) November 1959.

This article presents an evaluation of Nasser's position in the Middle East, his sources of power, and his vulnerabilities. It discusses Nasser's exploitation of conflicts between the Western Powers and the Communist bloc, divergencies within the two great power blocs, and the Arab-Israeli dispute. The impact of Nasser's strength on Western security is also evaluated.—Editor.

THE usual outlines for the study of a state lend themselves poorly to a study of the United Arab Republic (UAR). The territorial consistency of the UAR, its present or future resources, its social equilibrium, its internal structures, or its foreign politics cannot be studied without considering the powerful personal influence of President Gamal Abdel Nasser, founder of the state in its present form.

The UAR is not a definable state by its surface, population, production, structure, and politics, but rather is a "myth" springing from the personality of its founder. Such a thesis may surprise the

reader, but it also should provoke thought. The Western public should become aware of how much, in the political reality of the East, passions and ideas affect facts.

It is necessary, however, to define the use of the word myth. It is not used in the familiar sense to mean something which has no real existence, but rather as a story of forgotten origin that relates historical events and explains a belief.

Strange Birth of a Nation

A unique feature of the United Arab Republic is the fact that the state does not correspond to the sum of its compo-

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nents, Egypt and Syria. By implication it is something more. To the real weight of the two territories, to their peoples, and their wealth is added prestige which is the result of their union. This new state is more of an impulse than a structure. The conjunction of the two nations thus merged has been neither a natural phenomenon nor the result of the thoughtful will of the people. There has been a catalyst to facilitate a reaction that would have been improbable otherwise. The long-cherished, but always fruitless, ideal of Arab unity suddenly has become an effective factor of quick and decisive actions. The "Nasser Myth" has produced its effect.

Before going back to the origin of this myth let us recall briefly the conditions and circumstances of the birth of the United Arab Republic on 1 February 1958. Syria had just experienced a feverish year. Right or wrong she had convinced herself during 1957 that she was the object of plots woven by foreign agents; that her territory was strangled between the hostile armed camps of the member states of the Baghdad Pact and the Hashemite dynasties and threatened by invasion. Her appeals, which perhaps were marked by excessive nervousness, found listeners only in Cairo and Moscow.

Willing nonconformists, the Syrians had succumbed to the attractions of leftist ideologies in rather large numbers. The Socialists had gained strength during the 1953 elections by letting the hope of an agrarian reform glitter before the eyes of the wretched and indebted peasants, and the Communists won a seat although it is uncertain whether this was due to the personal charm of the candidate, Khaled Bagdache, or the effectiveness of their propaganda. During the troubled summer of 1955 the Defense Minister established contact with Moscow and voiced his alarm at the disposition of Turkish troops along the Syrian border. On 6 August he obtained an important agreement

for technical and economic assistance and a little later for military assistance.

The number of Syrians who feared the prospect of a rescue by the USSR is great. Beyond the hostile barriers of the Hashemite monarchies—Iraq and Jordan—Syria willingly discovered "counterallies" in the Arab States of Saudi Arabia and Egypt, and in October 1955 a military agreement with Egypt went into force. On 13 October an Egyptian battalion disembarked at Latakia and took up the defense in the Aleppo area. The Syrian population received this evidence of Arabian support with delirious enthusiasm.

The Soviet and Egyptian assistance has been effective. The Syrian crisis passed so quickly that the external threat to the country appears to have been more imaginative than real. But dream or reality, it left profound psychological traces. The Arabian or Afro-Asiatic conferences of solidarity became more frequent in Damascus and Cairo and they made the word "union" familiar to the masses. The best partisans of Syrian independence in their hate of Hashemite Iraq, dictatorial and "sold to imperialism," turned toward Egypt with increased confidence. People of the right, the moderates, and the religious personalities, frightened by the increasing Soviet prestige, saw in the Egyptian dictatorship an effective rampart against social disorder.

The Socialists in Damascus felt that their position was precarious and that they had within their reach the means of ensuring their local political predominance, the future of their social program, and the realization of their desire for unity. By amalgamating the Syrian state with the Egyptian state they realized the first effective step toward Arab unity. They gave their country an irrevocable predominance in the midst of the Arab Union.

On 14 January 1958 a decision was reached secretly by the Syrian Parliament in favor of a merger with Egypt.

The President of the Syrian Republic, Mr. Shukri al-Kuwatly, went to Cairo to negotiate the union and to overcome some unexpected Egyptian hesitations. More realistic and less emotional, the Egyptian statesmen actually preferred a federation initially. Mr. al-Kuwatly, who has fought for Syrian independence all of his life, felt that he was still defending that independence by preserving it from the danger of an ignominious annexation by Iraq. At the same time he removed the somber prospect of his own elimination by Mr. Khadel el Azem. Rather than fall before the despised rival he sacrificed himself nobly in the name of a superior ideal and before the obvious primacy of Nasser.

Except for Nasser's prestige, it is unlikely that so concise a decision at so favorable a moment would have come from Syrian leaders. Nasser appeared to be surprised and even disconcerted at the turn of events which far exceeded all reasonable hope.

Origin of the Myth

How has a myth that has turned the Middle East completely upside down sprung up around the figure of a simple man? In action, Colonel Nasser has shown qualities that have not been recognized properly. He has shown himself when it was necessary to be determined and courageous, capable, and even shrewd. If he has committed errors in judgment in matters of state because he had failed to inform himself completely or did not give matters sufficient thought, he has shown an extraordinary faculty to recuperate by making a springboard of his mistakes for spontaneous and immediate counter-measures. Finally, everything suggests that he believes profoundly in the task that he has traced for himself. He works in all sincerity for the good of a people whose profound qualities he knows, whose wretchedness dismays him, and to whom he knows how to speak with verve and appeal. In the full sense of the word he is a popular leader.

Other military *coups d'état* in the Middle East had elevated men to leadership who were devoted to the success of the struggles for emancipation but completely ignorant of the feeling and needs of the people. Nasser's rise has brought forth leaders from the middle class to whom a military career has given an exceptional social advantage without depriving them of contact with the lower classes.

Although technically dictatorships that swept away parliamentary regimes, these soldier governments characterize themselves in the Middle East by their solicitude for the disinherited masses. The xenophobia that they frequently evidence is a safety valve expressing the feelings of a frustrated people accustomed to seeing in imperialism the source of all their problems.

Thus Nasser benefits from popular support which he gains more because of his intentions than his accomplishments. It is here that some of the aspects of the myth begin to appear. Western critics often object that, since the Egyptian revolution, the lot of the fellah of the Nile has not changed. Speaking strictly of the material things in life they are right, but on the psychological level they are wrong. The fellah now has new and inestimable possessions: profound confidence in the good will of those that govern him and the tenacious hope of real progress in the future.

For many reasons Nasser found it necessary to outline an agrarian reform, the accomplishment of which would have required skills and resources which he did not have. He did not mention the delays which would jeopardize an already insufficient agricultural yield. The compulsory division of land has afflicted some greats, often members of yesterday's government; the country has not overcome its misery but it is being told that Nasser contemplates the ruin of those who were responsible for it. For example, the agrarian reform has made it possible for Nasser to

cause the sentencing—with much fanfare—of a big land owner who had opposed the division of his land. The people of Cairo have seen a handcuffed pasha in convict's clothes wander through the streets to serve his penalty. For the first time they have felt that "social justice" was not an empty expression. How can they help but believe in the power and sincerity of Nasser?

For the myth to develop fully it is necessary for it to respond to the real, as well as the emotional, needs of the masses. In the Arabian Middle East the great national concern is the conflict with Israel. In chastising the politicians, whom public opinion holds responsible for the 1948 disaster in Palestine, the military government again demonstrates high justice in the eyes of the people. Israel, the principal author of the evils that have afflicted Arabism, remains. How to remove her is a serious problem. The Western Powers veto direct action by supporting the *status quo*, by guaranteeing the integrity of Israel, and by maintaining a balance of power between her and the Arabs.

There is, of course, a way out of this dilemma. The West offered arms and credit to those who associated themselves with the plans of the Free World against Soviet totalitarianism. Egypt could become the center of a defense organization of the Middle East. Wedged between the North Atlantic Treaty Organization and the Southeast Asia Treaty Organization she would be the first military power of the Arab world, and would receive immense economic support. But Arab opinion is one of basic neutrality in the conflict between West and East. The Arabs want to think exclusively of the conflict with Israel in which they feel profoundly involved.

In 1954 the British evacuated the bases of the Suez Canal, thus Nasser finally obtained the total liberation of Egyptian soil. Obviously, these bases can be reoccupied in the event of war or the threat

of war. This situation links him discreetly but profoundly to the West. Nasser has confided that henceforth his foreign politics will be directed more toward the West than the East. He is fully aware that this is the maximum concession he can make. If he goes further, he will lose the confidence of his people and destroy the myth that is building up around him.

Great Britain always has based her Middle East politics on Baghdad and not on Cairo. In 1955 she entered into a defense organization with Iraq, Turkey, Iran, and Pakistan.

The Baghdad Pact was a slap at Nasser which he did not leave unanswered. He looked elsewhere for the means that he required. Contrary to the West which sponsors and supports Israel, the USSR is neutral in the Palestinian conflict and has, if anything, favored the Arabian thesis. Nasser asked weapons of the Soviet Union and her satellites after the signing of the Baghdad Pact. How the negotiations were conducted is in doubt, but by 27 September 1955 Nasser was in a position to announce that from then on the countries of the Soviet bloc would provide arms for the Arabian countries without restriction or limitation on their use.

This was a major event. It ushered in the era of massive Soviet intrusion in the Middle East and afforded unparalleled prestige for Colonel Nasser. He unconditionally freed the Arabs from the limitations that would have accompanied the acceptance of armament from the West. The Nasser myth was established.

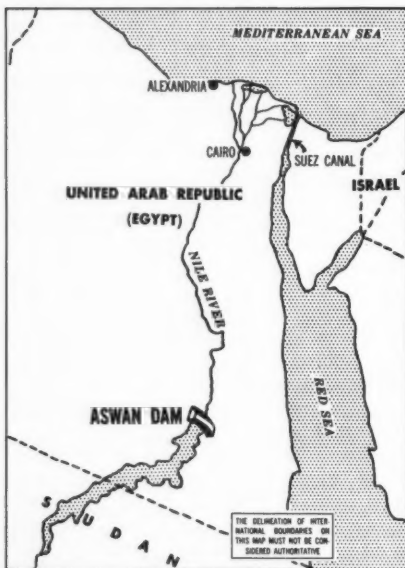
Nasser at His Pinnacle

The risks were great for the champion of Arabism and he was aware of them. By setting the door ajar to the Soviets, has he not sacrificed the realities of political structure to the artificial brilliance of prestige?

For Nasser, 1956 was singularly difficult. He went through difficult trials and

committed great, almost inexcusable, mistakes. In each case, however, he immediately recovered and by the end of the year was at his pinnacle.

Nasser well understood that the prestige he had acquired by obtaining Soviet arms was more effective in the neighboring Arabian countries than in Egypt. At home he had to meet the patient hope of the people for substantial improvement of the living standard. The main task of



the regime was more than agrarian reform which would remedy social injustices but which would not correct the insufficiency of production—it was the construction of the Aswan Dam to re-energize the Egyptian economy. This gigantic work will permit the cultivating of 800,000 additional hectares of land, improve drainage, improve navigability of the Nile, and permit the production of 10 million kilowatts of electric energy. The increase in electric power will multiply the potential industrial capacity of the country 30 times.

In order to build the dam Nasser again turned to the West. The International Bank for Reconstruction and Development considered this project sound and agreed to finance it with the support of the United States and Great Britain. Egypt would be provided about two-thirds of the required stable foreign currency and appropriate technical assistance. This offer was accompanied by the conditions normally set forth by the bank. These included "commercial" interest rates, quick reimbursement, technical control of the works, and supervision of the budget of the borrowing state. Nasser hesitated to be bound in this manner. The USSR advised him that she could probably offer the same financial and technical help with less onerous and more flexible conditions.

It is understandable that Nasser wanted to weigh the problem at leisure. But he procrastinated beyond reasonable limits and without consideration for the evolution of circumstances. The American fiscal year ends on 30 June and the financial offers of assistance, which have not been accepted officially before that date, elapse. This in turn annulled the offer of credits by the International Bank. During this period the American Congress looked upon financial assistance abroad with less and less favor. Segments of American public opinion began to doubt the desirability of supporting the construction of the dam, the cotton industry of the South feared the increase in competition, elements of the population felt that it would be better to allocate such assistance to Israel, and the conservatives objected to supporting a chief of state who had just established ties between himself and the USSR. Sudan, Ethiopia, and even Kenya wished to have a voice in a matter which, since it concerned the Nile, was not exclusively Egyptian from their viewpoint. Great Britain discreetly supported their objections. All of these factors were overlooked by Nasser who was hypnotized by the hope of obtaining aid from the USSR that would

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spare his having to submit to the Western control which was inseparable from the offers of financial support.

Nationalization of the Suez

During a visit to Yugoslavia in July 1956 Marshal Tito probably destroyed some of Colonel Nasser's illusions on the intentions of the Soviets, for Nasser notified his ambassador in Washington to accept the conditions of the offer of the United States, Great Britain, and the International Bank. At the same time, the ambassador was advised of the withdrawal of the American proposal. Nasser's answer is known.

It was the nationalization of the Suez Canal, an action which doubtlessly was planned for the future but which was decided upon as immediate retaliation. Thanks to this, Egypt had the last word and that is what mattered most to her master. It is also possible that he thought, as he stated later, that he would be able to gain sufficient revenue from the canal to ensure the construction of the dam in complete independence. The future was to deny this optimism. The choice of such an objective, which permitted a blow at France and Great Britain and spared the United States, made it possible for Nasser to divide the West.

Everyone remembers the events of the Suez affair. How this affair permitted the Nasser myth to take gigantic proportions and an impact without precedent is important. Nasser's action met with unanimous approval on the part of the Arabian governments, and aroused delirious enthusiasm among the people. In Jordan, a pro-Nasser government was swept into power in September 1956. Egypt exploited her advantages immediately; on 23 October she constituted a close military coalition with Syria and Jordan.

Israel, worried by the delivery of Soviet arms to the Arabian countries, strongly resented the threat. During the night of 29-30 October, she launched the Sinai

Campaign for the purpose of breaking the ring that had been formed around her. The Egyptian forces were routed completely. The French and British enjoined the antagonists to separate, then intervened by landing military forces in Egypt to take Port Said. The United Nations then directed a cease-fire; it was, paradoxically, the joint position of the United States and the USSR that saved Nasser from being crushed.

Cairo propaganda and Arab imagination immediately transformed the Egyptian escapade into a total triumph. In the diplomatic sphere, the positive success of Nasser was undeniable. On the military plane double defeat became a brilliant victory for the entire Arab world.

Some doubt may have existed in the minds of the citizens of Cairo who remembered having seen runaways from the Sinai army arrive in the capital, but for the Arabian masses Nasser was a demigod from this time on. Nasser is not a Bismarck, for he is dependent on intuitive judgment, but much more pertinent, he is at once Bismarck, Napoleon, and Garibaldi, for he is a diplomat, a politician, and a victorious strategist. He has the prestige of the social reformer whose accomplishments have been delayed only by imperialistic intrigues. He ceased to be an ordinary human and became a fabulous hero.

The United States unintentionally played a preponderant part in the fabrication of this 20th century myth and will be the last to recognize its existence objectively. While the Nasserian upheaval echoed throughout the Middle East, the Americans launched the idea of a Middle Eastern "void" which they felt called upon to fill. However, the Syrian crisis of the summer of 1957 illustrated their powerlessness.

The creation of the United Arab Republic on 1 February 1958 demonstrated the efficacy of the Nasserian myth on the Arabian people. In the spring of 1958

Nasser was still at the pinnacle. The medieval and theocratic Imam of Yemen, the religious chief of a community of Moslems, insisted on entering into the federation of the United Arab States.

Iraq's Defiance

On 14 July 1958 a revolution broke out in Baghdad. It began by making room for a republic, overthrowing King Faisal II, Prince Abdul Illah, and Premier Nuri as-Said. For a moment, it appeared that this event had sealed the complete and definitive triumph of Nasser. But Middle East affairs are always more complex than they appear. The revolution of Brigadier General Abdul Karim el-Kassem was, in some respects, similar to that led by Nasser, but General Kassem had no intention of becoming Nasser's lieutenant. On the contrary, after a short time he became his rival.

The military *coup d'état* of Baghdad, as the one in Cairo six years earlier, substituted a rule of the bourgeoisie for the autocratic regime of the pashas. The rapid development of a provisional constitution reflected the desire to unify Kurd people with Arab people within the Iraqi nation.

The first problem facing General Kassem as the head of the government was the stabilization of the various political factions to which the revolution had given freedom of expression. The pro-Nasser elements which took a great part in the *coup d'état* desired the rapid union of Iraq with the United Arab Republic. Kassem forcefully repressed this tendency. He relieved Nasser's supporter, Colonel Abdel Salam Arif, of his command and of his ministerial portfolio. Later he had him arrested and condemned to death, but he refrained from executing him. Kassem also reduced to silence the old hero of Iraqi nationalism and of the anti-British uprising of 1941, Rashid Ali el-Gailani, who was also suspected of Cairo pan-Arabism.

Nasser gained nothing by the downfall

of Nuri as-Said. It had been convenient for the Egyptian dictator to have as principal adversary this pasha who was "sold to the West" and despised by his own peoples. Instead of the odious tyrant, a military chief now governed in Baghdad who was loved by his people, who favored social progress, who was a fervent adept of Arabism, and perfectly free from attachments to the West. Kassem is as devoted to Iraq's independence as anyone. The Nasser myth in the Arab world thus ceased to be universal and unique; suddenly, it had lost much of its value.

Syrian opinion is now inclined to favor the new Iraq. The Hashemite tyranny, which she detested and feared in Baghdad, and collusion with the West have now been removed. If Syria had found herself in the presence of a free Iraq six months earlier, she probably would have associated with her rather than with Egypt in the first step toward Arab unity. The Kurd people now scorn the agitation of Cairo, and confidently turn toward the new government of Iraq.

The Communists are unpopular in the United Arab Republic, which, however, continues to seek the economic and financial cooperation and, at times, the political support of the USSR. In Iraq their activity is free; after the elimination of the pro-Nasser elements they tended to become preponderant. Iraqi relations with Moscow are very good. Kassem's enemies say that he will make a Soviet satellite of the state and, although events belie this accusation, it makes an impression.

Finally, in the petroleum question, instead of keeping in step with the United Arab Republic which would like to coordinate all Arab politics and participate in the profits of the producer countries, Iraq operates independently. Thus Kassem opposes Nasser in every issue, and Cairo propaganda rages against the new Baghdad regime.

The rivalry between the two "Arabian brothers" has taken on the aspect of a

bitter struggle. On 8 March in Mosul, during a leftist demonstration, an insurrection broke out which probably was organized by Nasser sympathizers with the support of the Syrian nomadic population. It is doubtful if Nasser ordered the uprising; however, he was elated at its occurrence and within three hours he proclaimed his active sympathy for the rebels. By this time, unknown to Nasser, the rebels were already defeated. Not only did he gamble and lose, but he was particularly imprudent in choosing sides since he had no effective means with which to come to the rescue of the Iraqi rebels.

If Kassem previously had intended to participate in the Arabian Oil Conference that convened in Cairo on 15 April, this action of Nasser's would have dissuaded him. But his egotistical evaluation of the Iraqi national interests already had caused him to turn his back on this enterprise. This conference, due to a lack of unanimity, was not productive. The dictator of Cairo, therefore, had to abandon the dream of royalties from the producer states such as Saudi Arabia and Iraq. This was a cruel failure for Nasser and a blow to his prestige.

The Egyptian dictator will not be deterred by this series of setbacks for he knows that it is easy to arouse Arab passions on the subject of the conflict with Israel. By recourse to this theme, which geographically and politically he is in a particularly good position to exploit, he hopes to rebuild around himself that Arabian unity that is necessary to maintain his prestige and to continue the myth.

Actually, since the incidents of Sinai and Suez, the Arab-Israeli conflict over Palestine had passed to a secondary position as far as Middle East affairs are concerned. The presence of the United Nations forces on the Egyptian-Israeli line of demarcation and at the entrance of the Gulf of Aqaba reduced the friction and alleviated the Arab blockade of Israel.

Public attention, which for several

months had been devoted to internal Arabian affairs, suddenly was drawn back to the fundamental conflict with Israel by the announcement that the USSR would permit those Jews, who were desirous of leaving the Soviet Union, to return to Israel. Had this action been taken, Israel would have received about one hundred thousand new immigrants in 1959. This would have given them a noticeable increase in power. Perhaps alerted by Cairo or at least sensing Nasser's anguish, the Kremlin quickly retracted its liberal decision and forbade the Jews to leave. By this action the Kremlin swung Arab feelings over to its side. But the incident marked a reawakening of the Arab-Israeli conflict which Nasser amplified and thoroughly exploited.

For two years Israeli merchandise on foreign vessels had passed through the Suez Canal without difficulty, but suddenly seizures were resumed by the United Arab authorities. In March 1959 the Liberian freighter *Manolis* and the German freighter *Lealott*, and in May, the Danish cargo ship *Inge Toft*, were stopped and held in Port Said. All three were transporting inoffensive Israeli cargo of potassium and cement toward Southeast Asia. Thus Cairo deliberately violated orders issued by the Security Council in 1951 for freedom of navigation in the canal. Cairo took the provisions of the Convention of 1888 on the free use of the canal just as lightly.

To Colonel Nasser it was important to confirm the continuance of the state of war between Israel and the Arab countries. He wished to emphasize that the United Arab Republic was the only Arab country that could conduct the hostilities effectively. He knew that on this familiar theme, popular feelings were aroused easily; governments, willingly or unwillingly, would support him and his prestige as the Arab leader would be restored.

In an interview on 30 June 1959 Nasser declared:

The Western Nations speak of Israel's right to navigate the canal. We care little what they say. Our duty is clear and we will continue to walk in the path of duty whatever the consequences may be.

In the course of the same interview, the President of the United Arab Republic declared that in renouncing the blockade of the canal he did not intend to abandon one of the weapons possessed by the Arab people which could be used against Israel. He was equally careful not to deprive himself of another valuable means of pressure constituted by the Arab refugees. The powers of the United Nations agency that specializes in the refugee matter, the United Nations Relief and Works Agency (UNRWA), were to expire shortly. The United Nations Secretary General, Mr. Dag Hammarskjöld, proposed the establishment of the refugees in the Arab States neighboring Israel. Thus these states would benefit from powerful international aid. This solution strongly resembled those that the Arab states had rejected for the past 10 years. Although the plan was submitted to President Nasser before publication, he did not object to it. It is not improbable that he expected the proposal to bring the Arab-Israeli conflict to a new crisis.

Events bear out the Cairo dictator. The Palestinian question furnished a theme of unanimity to the session of the Arab League in September in Casablanca. However, neither Jordan nor Lebanon thought that the Hammarskjöld plan should be rejected in its entirety. Neither Iraq nor Tunisia had settled their disputes with the United Arab Republic, and those two states were absent from the conference. These discords did not prevent the launching of violent verbal attacks against Israel and the adoption of aggressive resolutions. It was decided that special defense forces would be organized in the Palestinian area, grouped under the authority of a single general staff, which is, of course, Egyptian.

Six months after the affair of Mosul in which the Egyptian dictator awkwardly compromised himself, the situation had returned to his advantage. He had taken recourse in the theme of the Arab-Israeli conflict. This reawakening of Arab feelings, which he instigated with cynical energy, again enhanced his prestige.

Evening Twilight or New Dawn?

Nothing is as difficult to manage as a myth. A myth does not live by attentive care and wise foresight, but by improvisations and *coups d'état*. It is certain that Nasser recognizes these things and, when his myth pales momentarily, he launches furious diatribes and conspicuous maneuvers against Israel.

Thus he keeps alive a common enemy against whom the Arabs unite. No one knows the psychology of the Arab people better than Nasser, their resources and their weaknesses: no distraction, no negligence, no naivety must be expected.

Israel was unable to contribute actively to the weakening of the Nasserian myth, for her efforts to strike back only produced greater Arab unity. After the evident checkmate of the interventionism of the Eisenhower doctrine, those Europeans who know the Middle East best have advocated that internal dissensions in the Arab world be permitted to grow as a means of destroying the myth. The Western governments seem to have adopted this method to a degree, perhaps more out of weariness than conviction.

But the effectiveness of such procedures has rather narrow limits. After 18 months of Syro-Egyptian fusion, it does not appear that difficulties with the Arabian opponents of the United Arab Republic will destroy it.

The vigorous hostility of Iraq during the last year has not chalked up decisive scores against the United Arab Republic, even when the latter committed errors like the Mosul incident. Kassem, who certainly seems to be Nasser's equal in the

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field of practical politics, has not had the occasion nor the means to build up equal prestige for himself. He is hampered by enormous internal difficulties which absorb all his energy. Simply to survive is a feat for him. Recently, Nasser has drawn near to Saud of Arabia and Hussein of Jordan.

The hue and cry against Israel has helped, but it has not been enough. One of the secrets of Nasser's latest successes seems to reside in the anti-Communist attitude he has adopted. The game is a dangerous one, for he depends on the feelings of the Arab masses which remain almost completely seduced by the Soviet "anti-imperialism." Nasser's freedom of action is restricted further because he cannot go so far as to compromise technical and economic cooperation with the USSR.

By slaps at China the Egyptian dictator has arrayed himself against communism without impairing Soviet cooperation. This action has caused the Western Powers to be disposed more favorably toward him. He has never renounced the help of the West which is indispensable for the realization of his economic and social projects, but he has always revolted against paying the price which it asks.

In order to conceal his discreet maneuvers in the Middle East, Nasser depends on the blinding radiance of his myth. But if the maneuver becomes too obvious, the myth itself will be compromised. If it wished, the West could obscure the Nasser myth by causing the United Arab Republic to accept advances that are a little too obvious and a little too exclusive.

Is an effort in this direction something to be ashamed of if it is directed against

the Nasser myth and not against the people of Egypt? A weakening of the myth, combined with effective Western aid, would be the best thing that could happen to the masses of the Valley of the Nile. This constitutes the best hope for the Arab people having enough to eat 25 years from now. The Nasser myth originated great emotions of Arabism, but it has not been of concrete aid to the unfortunate Egyptian fellah. For several years Nasser had managed to prevent the fellah from realizing his misfortune. This is a situation which cannot continue indefinitely.

The USSR continues to furnish strong assistance to the United Arab Republic in spite of Nasser's attitude toward the Egyptian and Syrian Communists. The USSR hopes to achieve two things in return for her assistance. First, lessening the attraction and necessity for Western aid she will prevent Nasser from compromising his own myth by seeking such aid. Second, by supporting both Nasser and Kassem she succeeds in maintaining agitation in the Arab world.

However, Nasser has triumphantly overcome such errors and serious reverses as the refusal of American credits for the Aswan Dam, the double defeat at Sinai and Port Said, and the Mosul affair. Many elements play a part in Nasser's gains which cannot be calculated logically, but which are unexpectedly effective when they occur at exactly the right time. Certain signs indicate that the United Arab Republic is in the twilight of its power, but Nasser's recent successes can lead to a new dawn. The observer's task becomes singularly delicate, for it is not only a question of facts which must be considered but also the myth and the illusions.

Geopolitics of Arab Nationalism

Digested by the MILITARY REVIEW from an article by Dr. Clovis Maksoud in the "Journal of the United Service Institution of India" January-March 1959.

This article by Dr. Clovis Maksoud, who is described by the editors of the Journal of the United Service Institution of India as a "nationalist Arab intellectual of the younger generation," presents a case for Arab "positive neutrality" in the current world struggle. Of particular interest is the theory of "derivative power" which it sets forth. The material in this article was delivered as a lecture while the author was serving as a visiting professor at the School of International Studies, New Delhi.—Editor.

THE "Arab nation" includes the area from Morocco to Iraq and south to the Arabian Peninsula. In this area there are certain places which are still under direct colonial rule. The objective of the Arab nationalist movement is to liberate these colonial pockets from foreign rule. There are other regions in the area where real independence—to distinguish it from legalistic independence—has not been achieved. In these regions the popular aspiration for a policy of nonalignment with either of the two major power blocs has not been fulfilled because certain ruling groups within the Arab society have imposed commitments which are not based on popular consent.

The objective of Arab nationalism in international affairs is to realize positive neutrality. Positive neutrality is a policy of nonidentity with the permanent interests of either the Soviet or the Western blocs. The Arabs can feel political affinity at times with one bloc or the other, but this intermittent affinity must be distinguished from continuity of identical interest.

Geopolitics is the political impact of an area on power relationships because of its geographical features. The geopolitical significance of an area is determined by its location in relation to the nations or groups of nations which can generate military, strategic, economic, and financial

power on a global scale. In the World War II period power shifted from a polio-centric into a fundamentally two-centered situation. This shift to the Soviet Union and the United States did not exclude the fact that there are also subsidiary centers of power such as Great Britain, France, Czechoslovakia, and China which may integrate into the over-all defense system of one of the two main centers.

The situation which the Arabs have faced since 1945 has coincided with a determination for national liberation and national unity. We were neither centers of power nor subsidiary powers. Instead, we were a disunited nation fragmented against our will. Although we do possess considerable economic power in the form of oil, this power is not fully controlled by the Arab nation itself. Where then lies the power with which the Arabs can achieve the objectives of nationalism?

In terms of geopolitics the Arab world possesses a *form of derivative power*. China is a generator of power in a subsidiary way because of her demographic power and potentially because of her military and economic power. England is a subsidiary power, not so much because of her demography but because she lives on the momentum of previous power and continues to possess certain coherent institutions which enable her to exercise a degree of influence in the world. This influence

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might not be as useful as it was, but it still constitutes an important factor in international affairs. The power of the Arab nation lies in its location in a very strategic area and in its oil which is and, at least for the next generation, will be an important source of power. Under existing circumstances these two sources of power are disrupted and their full value cannot be realized readily.

Sources of Derivative Power

Derivative power emanates from the evolution of the dichotomous concentration of power with more or less an equal military capacity. The basic contradiction of interests of these two primary world powers leads to their fundamental neutralization. In other words, the more these centers proximate equality of power between themselves, the less their capacity to exercise fully the power they possess in world affairs. In this respect the Arabs and others can derive a form of power by default from this neutralization. This is the first meaning of *derivative power*.

Between 1949 and 1955 Yugoslavia sustained her independence not because of the internal dynamics of her system alone, but because of the deterrent presence of the West vis-à-vis the Soviet Union. The revolution in Iraq which took place in 1958 was protected, in terms of geopolitics, not only by the fact that it had popular consent and agreed with the basic objectives and aspirations of the people of Iraq, but also by the deterrent effect of the Soviet Union as a neutralizer of the Western bloc. The deterrent exercised mutually by the two blocs enables the *derivative power* to assert itself conclusively. In the final analysis, this is what is meant by positive neutrality. It is the diplomatic expression of *derivative power* by underdeveloped nations.

Acquisition of military bases on the peripheries of the territory of one center of power or another has become the major preoccupation of big power diplomacy.

This is a fact which the Arabs have to face. It is necessary to prevent the Arab area from becoming a place where short or medium-range bomber bases can be installed for the benefit of one bloc or another. Therefore, the entire issue of diplomacy and, as a matter of fact, that whole meaning of independence is reduced to preventing one of the power blocs from securing short and medium-range bomber bases in the area. This is the strategic significance of Arab nationalism which is faced with a psychological handicap because it is often argued that, in the world of today, no country can be completely independent or completely neutral. The Arab nationalist naturally does not comprehend the full theoretical content of positive neutrality, but there is a basic popular feeling that can be evoked to make neutrality effective.

The second source of *derivative power* is the fundamental contradiction that lies within both blocs and which is found in the relationships between the primary generators of power and their allies. It is exemplified by the contradiction between the Soviet Union and China, and that between the United States and Great Britain. This contradiction is not antagonistic, but is a difference in the priority of interests and the different viewpoints from which they look at problems. The Arab nation derives its primary source of power from the inherent contradiction between the two power blocs and from the inherent contradiction within the power blocs.

Oil and Neutrality

It may appear that the Arabs are depending on contradictions for power and for the development of an international climate that is conducive to the exploitation of their potential power. The potential power that exists in our area can be realized only when the Arab people enjoy full participation and commitment in society. Improving the standards of living, attaining political liberation, uniting the Arab

nation, and providing the individual Arab a sense of belonging to society is related to *derivative power*.

The Western Powers have a vital interest in the oil resources of the Arab nation. The Arab position is that the flow of oil should continue. Only in periods of absolute urgency should it be considered a valid policy to destroy the production resources of the area to deny oil to the Western countries. If the sale of oil is dependent upon the granting of military bases against the Soviet Union, then Arab national interest will dictate a change of attitude and a conflict is sure to develop.

The Arab diplomatic position is to provide the oil and deny the bases. In this respect, *derivative power* is given concrete diplomatic meaning. This neutrality does not mean indifference but only noncommitment to the total requirements of one bloc or the other. The Soviet bloc would like to see the Arabs deny oil to Europe. However, we know that our commercial relations and the logic of international power means that we cannot deny oil to western Europe for the next 25 years. On the other hand, the West cannot make the procurement of Arab oil contingent upon a strategic commitment on our part.

Commitment and Partial Commitment

Our viewpoint on world problems is different from that of London, Paris, Washington, or Moscow. Our required priorities are different from those of the Soviet or Western blocs.

This difference enables us to exercise the *derivative power* and establish derivative relationship. In this manner noncommitment becomes partial commitment. Partial commitment to the two blocs means noncommitment on certain matters and some commitment on others. We are committed to the West to allow them to secure oil. We are also partially committed to the Soviet bloc in the sense that we do not allow the West to have short-range bomber bases within our area which can

be used against the Soviet bloc. This is the principal meaning of positive neutrality, at least our version of it at this stage of development. Noncommitment means partial commitment on certain issues which are determined by our national interest and the interest of world peace.

An Area of Crisis

Positive neutrality realizes two major objectives because of the near equality between the two blocs. Their meeting place develops into a crisis area, that is, Germany, Vietnam, Korea, and potentially ourselves. Arab diplomacy must extricate us. Whenever a crisis area has evolved, the result has been the division of the national entity of the area. Korea was a country where the two power blocs met and a crisis area evolved. To relieve the world from the tension of the crisis, the national entity was divided. The same thing happened in Vietnam. In Germany the problem continues and the situation remains potentially explosive. We, in the Arab nation, are a crisis area. Our commitment to one bloc or the other will intensify this fact. Our disengagement will reduce the tension and, therefore, will help in a concurrent reduction of international tension while safeguarding our basic objective. This gives us a further advantage for we can initiate our diplomatic positions and safeguard our basic interests without being fully dependent on the agreement of two power blocs.

Our capacity to initiate situations and alternatives will make the two power blocs respect our *derivative power* and guarantee our capacity for derivative relations. Herein lies the significance of our position in the world today. How far we will succeed depends largely on the capacity of this new Arab diplomacy to extricate us from the position of crisis. Our social revolution has a vested interest in the relaxation of international tension. Only through relaxed international tension can we make our economic and social priorities feasible and realizable.

The Mediterranean in the 1960's

Translated and digested by the MILITARY REVIEW from a copyrighted article by Admiral Pierre Barjot in "Revue Militaire d'Information" (France) August-September 1959.

The strategic importance of the Middle East is linked closely to the control of the Mediterranean Sea and its exits and entrances. Here, in condensed form, are the thoughts of a senior French naval officer on the significance to the West of the Mediterranean-Suez Canal-Red Sea complex.—Editor.

IN THE course of history the Mediterranean has been either a passageway or a frontier between antagonistic civilizations—at times it has been both.

Trading post for the Greeks and the Phoenicians; battlefield for the Athenians and Persians; and a Roman lake for eight centuries, the Mediterranean was later invaded by the Crusaders. It has furnished bulwarks of Christianity at Rhodes and Malta where the Knights of St. John supported the great sieges against the Turks which saved Christian civilization from Turkish invasion.

The western advance to the east regained momentum in Egypt in 1798. The Mediterranean then became the great maritime route to the Indian Ocean and the Far East. The north-south route was opened by the Algerian campaign of 1830 which established a link between Europe and Africa. The Mediterranean became a European lake surrounded by the French Protectorate in Tunisia, English-occupied Egypt, and the Italians in Libya.

During the two World Wars the Mediterranean became a battlefield between the countries of Europe. The major battles included Salonika in 1917, the landing in North Africa in November 1942, and the first stage of the liberation of Europe through Sicily, Italy, and southern France in 1943-44.

Ten years later a movement away from the east began. British troops evacuated the zone of the Suez Canal and Arabian

nationalism asserted itself in Libya, Tunisia, and Morocco.

In the meantime, the Mediterranean has become a sea of much marine traffic. It is the greatest maritime corridor in the world for many nations. The extreme density of the traffic is indicated by the fact that a total of 1,200 to 1,300 vessels a day are at sea or in the harbors.

The Mediterranean and Oil

The oil production of the Middle East has increased rapidly since the war and particularly during the last five years, in spite of the Suez crisis in 1956.

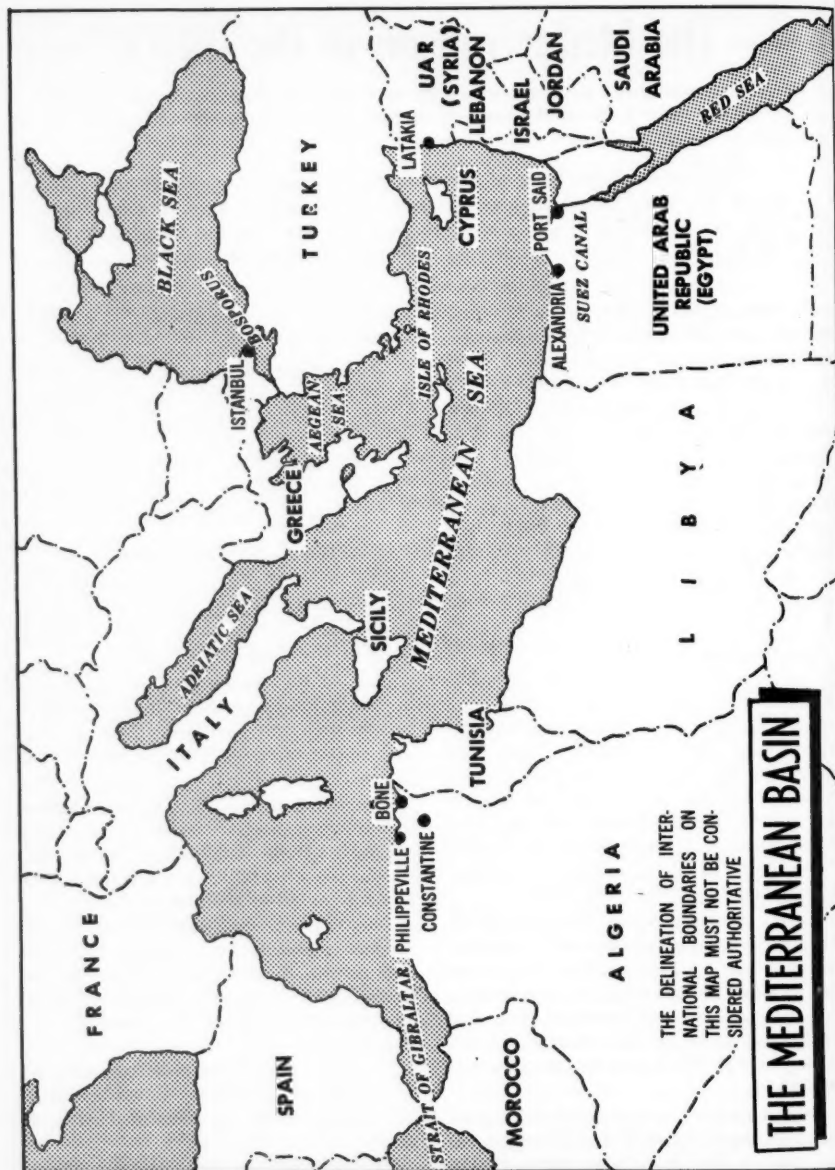
Half of the Middle East oil production is distributed via the Suez Canal, one-quarter through the pipelines of the Levant, and one-quarter by way of the Indian Ocean.

In spite of the abortive Suez campaign, the Mediterranean remains the great oil conveyor of the Middle East; as production increases it will serve the same function for the oil of the Sahara Desert.

Two million square kilometers of the Sahara constitute an oil basin that is as rich as the Arabian peninsula. The fuel is channeled to Europe through the ports of Constantine, Bône, Philippeville, and Bougie.

The flow of merchandise from the Algerian harbors, which amounted to 10 million tons in 1952, will have doubled in 10 years.

This prospect indicates the seriousness



of the
Mediterranean

The three-ropes. Arctic Sea, a Of the subma In 1 going Khrus Doubt closed Baltic ocean. rines the pa basis. nally Unite in Al The threat rine f upon passa subm The Port Unite April the a bilitie The perfe cruise the M the M Alban Th the in terra Midd count seaw ports

of the threat of Soviet submarines in the Mediterranean.

The Submarine Threat

The USSR possesses 480 submarines, three-fourths of which are based in Europe. Presumably, 125 to 130 are in the Arctic Ocean, 130 to 140 are in the Baltic Sea, and 70 to 80 are in the Black Sea. Of these, 250 are believed to be oceangoing submarines.

In 1914 the Kaiser had only 25 oceangoing submarines. Hitler had only 50. Khrushchev has many times this number. Doubtlessly, many of them are based in closed seas such as the Black Sea or the Baltic Sea, but the Arctic is an open ocean. Furthermore, four Soviet submarines have been stationed in Albania for the past year on a more or less permanent basis. Nine submarines that were originally Soviet are now flying the flag of the United Arab Republic and are stationed in Alexandria.

The Mediterranean shipping passage is threatened seriously by the Soviet submarine forces. This threat is not dependent upon the Soviet Union's ability to open a passage through the Dardanelles for the submarines of the Black Sea Fleet.

The expedition of November 1956 at Port Said, as well as operations of the United States 6th Fleet in Lebanon in April 1958, certainly demonstrates that the allied navies have retained their capabilities in the Mediterranean.

The Soviet Union has understood this perfectly. In 1957 and 1958 she sent two cruisers, the *Kurusov* and the *Idanov*, to the Mediterranean to show themselves in the harbor of Latakia in Syria and in Albanian harbors.

The Suez crisis reminded the world of the increasing strategic value of the Mediterranean Sea. It affects the Straits, the Middle East, the Balkans, and the Arabian countries. When conflicts break out, this seaway immediately takes on decisive importance. It is essential to the Atlantic

Alliance. Lieutenant General James M. Gavin, Retired, has emphasized that Africa is the key to Western European Defense; the Middle East is the key to Africa. How could it be defended without control of the Mediterranean?

Threats Against East Africa

The Soviet Union already has made progress in the Middle East. The rapidity and importance of this progress are present in everyone's mind. Propaganda developments precede and follow infiltration into the economic order, and prepare the way for political domination.

It is evident that improved protection must be provided the position of the Western countries in East Africa to counter the gap that has been opened in the Middle East by our adversaries.

The Red Sea is controlled by two ports. The northern one, the Suez Canal, is in the hands of Egypt. The one in the south, the Strait of Bab el Mandeb, is hemmed in by Yemen, Eritrea, the tiny British island of Perim, and the French coast of Somaliland.

On the east bank of the Red Sea violently anti-British Yemen constitutes a Communist starting point for a military and ideological offensive aimed at evicting the English from Aden. The Communists would like to free the small Arabian states in the Aden Protectorate, Oman, and Muscat from British influence. The British Colonial Office would like to federate these small states into a southern Arabian state affiliated with the Commonwealth.

A news report of 21 April 1958 stated that new Soviet weapons had arrived in Yemen, including a large quantity of self-propelled artillery. Russian engineers were constructing a port on the Yemen side of the Red Sea where a naval base would be installed.

On 13 May a similar announcement stated that Soviet engineers were installing a naval artillery battery on the coast of Yemen, across from Perim, in order to

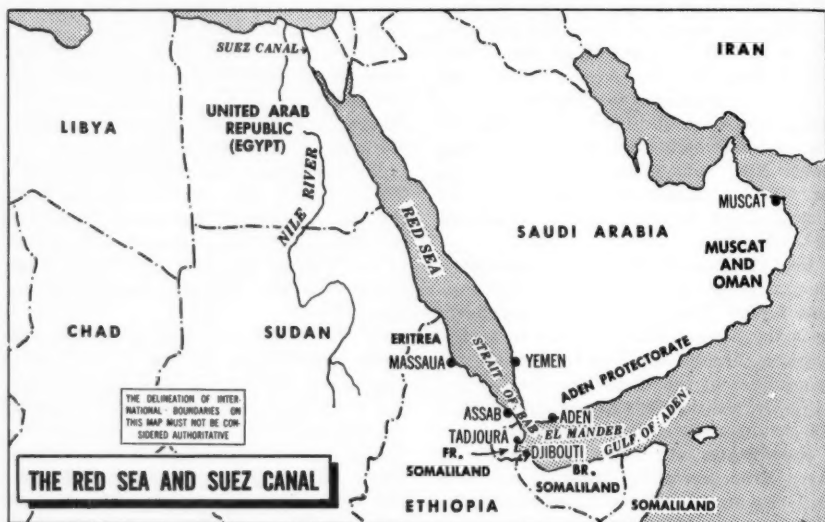
control the circulation of the shipping in the Strait of Bab el Mandeb. British reinforcements were rushed to Aden to meet this danger.

The Communist efforts against Aden also are directed against Djibouti on the opposite shore. To control the Strait of Bab el Mandeb completely both banks must be dominated. The western bank is held by Eritrea which is federated with Ethiopia and by French Somaliland. The principal harbors are Djibouti and Assab.

Ethiopia watches the shadow of the So-

remains to Ethiopia since Nasser has seized the Suez Canal. Freedom of maritime traffic across the strait is essential to the economic future of Ethiopia.

The commercial and strategic value of the French Somaliland strip is considerable: the railway, an airfield, and a modern harbor constitute an important complex. The railroad provides transport facilities to support strategic stockpile operations and the area could accommodate a secondary airfield. The inner harbor of Tadjoura which is much larger than the



viet Union expand in the Red Sea with misgivings. Enclosed on the north by Sudan and the new United Arab Republic, Ethiopia is losing her power in the Middle East and may find herself once again reduced to an African power. Therefore, it is toward the south, the Indian Ocean, and Somaliland that her future projects are directed. Federation with Eritrea has given her outlets on the Red Sea with 800 kilometers of shoreline at Massaua and Assab. The Strait of Bab el Mandeb is the only outlet to the Indian Ocean that

one at Aden can accommodate nearly 200 vessels.

The best harbor on the Red Sea is, without a doubt, Djibouti. Being the terminal of the French-Ethiopian railway line, it has been called one of the "lungs" of Ethiopia. Thanks to the French shore of Somaliland, that country can control the southern entrance to the Suez Canal. Since their withdrawal from Indochina, Djibouti and Madagascar are the pivots of French strategy in the Indian Ocean. This strategy would be dismantled completely by the

loss of one of these two positions. Madagascar is associated with the route to the south around Africa. Djibouti is linked with Suez.

Between the North Atlantic Treaty area and the Southeast Asia Treaty area there is an immense void in which the Suez Canal and the oil of the Persian Gulf are located. In this unorganized region the USSR exerts continuous pressure to neutralize the two great seaways—the Red Sea and the Persian Gulf—which enable the American Fleets to approach the Communist empire and offer opposition to its threats.

Africa will have to be defended against the subversive nucleus of the Middle East and Asia who aim at the French and British positions on the Dark Continent. France will be able to play a part in this work if she retains her strength in the Mediterranean and the Red Sea. The French shore of Somaliland remains a last forward bastion at the hinges of Africa and Asia. It faces the Middle East in proximity to the oilfields of the Persian Gulf and to the Suez Canal on the most direct route to Madagascar and the Far East.

General Ely, in *Revue de Défense Nationale*, November 1958, asked whether Western strategy should not be revised to provide a more effective opposition to the Communist advance which is taking place without slack in the areas where Western defense is less solid than it is in Europe. He said:

The impact of this push appears in Southeast Asia; in the Middle East where the threat is now directed against the great communications and oil centers of the West; along the southern bank of the Mediterranean Sea where the oil of the Sahara risks isolation; and across Dark Africa where it approaches the Atlantic shores that are the closest to the American Continent.

General Ely further stated that "the threat against East Africa has taken shape by way of Iraq, Saudi Arabia, and Yemen."

Thus it is obvious that this maritime region—where Europe, Asia, and Africa join—is vital to the Free World. The center of gravity of the European and African defense has shifted southward. Hence it is necessary to remain master of the Mediterranean.

... we must maintain an over-all military force adequate to our security needs, and do it without wrecking our economy. The steadily increasing cost of weapons makes it mandatory that we make the most searching appraisal of what our military force should contain, to the end that it has enough of everything we do need, but not more than we need.

We must, of course, be ready to meet the ultimate threat—but not to the exclusion of being able to cope with lesser, more likely, threats. To this end all services must maintain a capability for limited wars, which, although limited in area and in objectives, may not be small wars. Seapower—the ability to use the seas for our purposes and to prevent their use by the enemy—is vital to our security and an essential part of our over-all military structure.

Admiral James S. Russell

Behind the Scenes of the Red Admiralty

Translated and Digested by the MILITARY REVIEW from an article by Lieutenant Commander Fritz E. Giese in "Wehrkunde" (Federal Republic of Germany) October 1959.

Stalin had visions of the Soviet Union as a major naval power—a dream that he never realized. Khrushchev, although showing little respect for the navy or her leaders, has learned to use the navy as a weapon in the struggle for international power. Internal factors, important to an evaluation of effectiveness of the Soviet naval forces, are presented in this article.—Editor.

FOR geographical reasons, Russia has been compelled to accept a subordinate position for her naval forces among the great World Powers. During the times of the czars only the Baltic Sea Fleet and the Black Sea Fleet existed, and for a relatively short time strong forces were stationed in east Asia. The North Sea Fleet was established in the thirties, after which came the formation of the Pacific Fleet.

In the first years of his leadership, Lenin had considerable difficulties with the navy. In March 1921 he had to quell a very serious uprising of the navy in Kronstadt. Stalin too had much to contend with because of the political bickering within the Red Fleet. However, as time passed he became increasingly aware of the navy's significance in the Red armed forces. This did not stop him from including the fleet in the bloody purges of the armed forces in 1937-38 in connection with the trial of Marshal Tukhachevsky. The commanders of the fleets of the Baltic, the Black, and the North Seas, as well as the Commander in Chief, Admiral Orlov, fell victims of this purge. In spite of this it appears that the fleet was close to Stalin's heart, for he did much toward furthering its development and modernization. In the days of the purge the navy was often spoken of as "Stalin's boys in blue." However, even Stalin did not try to give a more prominent position to the fleet within the framework of the combined Soviet armed forces than that of a supporting arm of the Red Army.

In contrast to many Soviet military leaders and influential admirals, Stalin probably had visions of an "oceanic fleet," for only a fleet of that size could satisfy his naval ambitions. It is an established fact that, beginning with the year 1939, the building of naval ships was accelerated in the Soviet Union. After the conclusion of the German-Soviet agreement in 1939, Moscow tried to obtain extensive German assistance in shipbuilding.

During the Second World War the Red Fleet played only a defensive role. But apparently in 1947 Stalin remembered his maritime penchant and an intensified propaganda for the fleet was begun. The "day of the Red Navy" which had been instituted in 1938 was revived. The navy had no cause to complain of insufficient recognition as long as Stalin was at the helm. Still all was not as it should be among its high commanders.

Admiral Kuznetsov had been at the head of the navy since 1939. He was a staunch supporter of an oceanic fleet. Although temporarily removed from his post for political reasons, he again took over the Navy Ministry in 1951 and headed it until Stalin's death. Unquestionably, Kuznetsov must be regarded as one of the founders of the modern Soviet Fleet. It is, in a large measure, due to his efforts that the training of a strong reservoir of personnel for the Red Fleet was emphasized. Apparently he did not succeed in gaining Khrushchev's confidence, for in 1955 he was replaced by

Admiral Gorshkov as commander in chief. The latter began the reorganization of the Soviet Navy into units that are compatible with current naval warfare doctrine.

His first deputy is Admiral Golovko who is said to be no less energetic. The third role in the high command of the Red Navy is played by Admiral Bassisti who is a specialist on the Mediterranean Sea. Behind these leading figures of the Soviet Admiralty are the commanders of the Baltic Fleet, the Black Sea Fleet, the Pacific Fleet, and the North Sea Fleet.

The Commander in Chief of the Navy, Admiral Gorshkov, is subordinate to the Defense Minister, Marshal Malinovski. Within this framework Gorshkov's deputy holds the approximate position of an undersecretary of the navy. Of the same rank are the chief of the navy war council and the head of the political section. The navy war council has advisory functions only.

Khrushchev, Marshals, and Admirals

The attitude of Premier Khrushchev toward the Red Fleet initially was negative. In 1955 as Secretary of the Central Committee of the Communist Party, Khrushchev paid a visit to Sevastopol. He observed during this visit that "the fleet is merely there to visit foreign missions or to serve as transportation means for Soviet diplomatic representation." It might be concluded that he was influenced by his aversion to the commander in chief of the navy at the time, Admiral Kuznetsov. It is equally possible, however, that he wanted to express his general disregard for the navy. Supporting the first conjecture is the fact that shortly after this visit, Admiral Kuznetsov relinquished his post to Admiral Gorshkov for "reasons of health."

It is an established fact that the navy was still in the Kremlin's disfavor as late as 1956. The former Premier, Marshal Bulganin, made a similar remark when he visited London with Khrushchev. Various marshals have expressed their low opinion of the fleet in an even more pointed man-

ner than these two statesmen. It is reported that Marshal Sokolovsky did not hesitate to tell Admiral Gorshkov that the navy was "totally obsolete for today's warfare." Still another well-known Soviet military leader of the Second World War, Marshal Konev, did not mince derogatory observations in public.

Recently, however, much seems to have changed in this respect. While Khrushchev himself does not accord his personal benediction to the fleet as Stalin had, it is, nevertheless, apparent that he gradually has come to realize its value for his political ends. At least now he knows how to use it effectively as a threatening weapon. At the present time, high officials of the Soviet Union outdo each other in demonstrating the importance and the strength of the Red Fleet to the world. *Pravda*, on the occasion of the last "day of the Red Fleet," stated:

The navy today has all modern means of combat. She is not only capable of defending the Soviet borders but can also—and in cooperation with the air force—destroy enemy naval forces. She is further able to deal mighty blows against objectives that are located on other continents.

Such praise cannot erase the impression that there is still much to be desired in the navy. Articles in *Sovetskij Flot*, the organ of the Red Fleet, have, on several occasions, openly pointed out faulty conditions in the navy. The object of these attacks has been primarily the North Sea Fleet.

Problem Child of the Kremlin

The Soviet Fleet of the North Sea is the youngest of the four Soviet naval forces. Her crews have to endure what is probably the worst climatic hardships and discomforts of all the fleets. This may be the reason why laxity in discipline stands out most in that command. In May 1958 serious criticism of the conditions in the North Sea Fleet became known for the first time. These complaints dealt mainly

with the neglect of political instruction of the crews, and with the low combat efficiency of the individual units. Officers as well as crews were sternly reprimanded for their political attitude.

Red Star, in an article by the Commander in Chief of the North Sea Fleet, Admiral Tshabanenko, pointed out, first of all, that his fleet had the mission of protecting the seaway between the Atlantic and the Pacific Oceans. He also pointed out that his seaway is of the greatest importance, but that the climatic conditions there were particularly harsh thus making duty most difficult. After an account of various deeds of his crews, the admiral comes to the real purpose of his article and declares:

Although the Soviet Navy has excellent ships and capable crews, the main weight still lies with the human being. The education of the crews is, therefore, of the utmost importance and must not be forgotten.

While Admiral Tshabanenko shamefacedly indicates that much is not as it should be in his fleet, the *Sovetskij Flot* expresses itself much more clearly in an article which states:

The inadequate Marxist-Leninist education of the officers, who show insufficient interest in political training, clearly demonstrates where the deficiency lies. The plans that have been worked out by the political section for officers' seminars have failed to take the low spiritual and political level of the officers into account. Only half of these officers have declared themselves willing to study the history of the Communist Party of the Soviet Union.

The inadequate political training of the crew members is criticized sharply: "This training is conducted sporadically, usually while inclement weather conditions prevail. There is absolutely no interest in political exercises."

Why is it that cases of lax discipline and rebellion occur most easily in the navy?

This probably results from the confined life that is led by ships crews which makes them particularly vulnerable to such incidents. The situation is aggravated in the Soviet Navy by the never-ending changes of her position within the over-all organization of the armed forces which prevents the inner structure of the navy from functioning smoothly. The navy has been placed repeatedly under the same ministry as the army. Under these circumstances she has played the part of a stepchild. It is easily understandable that this did not particularly bolster the pride of the officers or the men. In addition, the "political officers" played an important role in the Soviet Navy long after they lost their significance in the army.

It appears that the Soviet Navy in many aspects still is the problem child of the Kremlin. However, this must not lead to the opinion that individual incidents endanger the dependability and striking power of the navy as a whole. The Soviet Navy may be inclined to contradiction and perhaps even to opposition, but she is an unalterable part of the Soviet armed forces and, therefore, a part of the prevailing system. The navy's main deficiencies appear to be the lack of a real tradition and the still inadequate military training of her crews. However, these crews are recruited from among soldiers who will surely fight as bravely as their comrades in the army and the air force in the event of an emergency. There are sufficient examples in the past that bear witness to this fact. Even in Russia's worst defeat on the seas, the battle near Tsushima in the Russo-Japanese War of 1904-5, the ships crews, for the most part, never faltered in spite of revolutionary unrest at home. Primarily, it was the higher officers who failed because they were lacking in the necessary combat morale and had insufficient training in strategy. It is interesting to note that none of today's leading naval officers of the Red Fleet held an independent command in the last war.

BOOKS OF INTEREST TO THE MILITARY READER

THE SILENT WAR IN TIBET. By Lowell Thomas, Jr. 284 Pages. Doubleday & Co., Inc., Garden City, N. Y. \$3.95.

By LT COL C. S. FREED, *Armor*

Most Americans, even those purported to be informed in world affairs, lack an intimate knowledge and appreciation of the events that have taken place in Tibet in recent years. Preoccupied with the Korean War and the conflict in Indochina, the Free World took little note of Chinese aggression in the remote uplands of Central Asia until the occupation of Tibet by Chinese hordes was an accomplished fact. India, Tibet's major friendly neighboring power, was concentrating on building on her new found independence and, although sympathetic to the Tibetan cause, could offer little more than good wishes in her struggle against oppression.

The reader is carried through the search for the 14th Dalai Lama, his discovery, recognition, and elevation to the throne of religious and temporal leadership in 1934-35, to his ultimate escape into India in the spring of 1959. Vividly portrayed are the moral and religious issues which forced upon the Dalai the decision to flee his country.

In this book Lowell Thomas, Jr., demonstrates a deep respect for the sincerely religious peoples of Tibet and a keen appreciation for their culture and traditional ways of life. The book is in itself a study of understanding. It is strongly recommended for the military or nonmilitary reader.

THE WEST POINT ATLAS OF AMERICAN WARS. Volumes I and II, 1689-1900 and 1900-1953. Edited by Colonel Vincent J. Esposito, Professor and Head of the Department of Military Art and Engineering, United States Military Academy. Introductory letter by Dwight D. Eisenhower. Frederick A. Praeger, Inc., New York. \$47.50 set.

The two volumes of this series represent a comprehensive collection of detailed information on the individual battles, major campaigns, and wars fought by the United States from 1689 through 1953. Many of the maps included bear a striking resemblance to those in the two earlier volumes—*Atlas to Accompany Steele's American Campaigns* and *A Military History of World War II, Atlas*—which also were prepared by the Department of Military Art and Engineering of the United States Military Academy.

The new set, however, is much more complete in its coverage and each map is faced by a full page of narrative text outlining clearly and concisely the period of military history covered by the map.

Prestige of the series is enhanced by a preface by President Dwight D. Eisenhower. This is a monumental work of great significance to the student of military history. Its 256 maps and related text provide the most convenient ready reference source on all major wars in which the United States engaged which has yet been made available to military writers and students.

MAN, THE STATE, AND WAR. A Theoretical Analysis. By Kenneth N. Waltz. 263 Pages. Columbia University Press, New York. \$5.50.

By MAJ FRANCIS H. HELLER, *USAR*

In his introduction, Dr. Waltz tells us that the subject of his book is "How to Think About War and Peace." More precisely, the author seeks to examine to what extent traditional concepts of political philosophy can explain the age-old question of why men should (or would) resort to war. To this end, he investigates three possible lines of explanation:

1. The major cause of war is to be found in human nature.
2. Wars are the result of conditions within national states.
3. Wars are caused by the nature of the nation-system.

This is not an easy book to read, especially for a reader not versed in the methods of political science, but it is highly suggestive and rewarding. A feature that should, quite independent of the text, be of interest to the military reader, is a 12-page bibliography which lists a very considerable number of books and articles in which social scientists of varying persuasions have applied their insights to the phenomenon of war.

THE ATLANTIC TRIANGLE AND THE COLD WAR. By Edgar McInnis. 163 Pages. University of Toronto Press, Toronto, Canada. \$4.50.

By LT COL JAMES M. HALL, *Arty*

This is a book for the serious student of international affairs. While relatively short, the volume is a thought-provoking search into the alliance between the United States, Canada, and the United Kingdom.

The author points out that never before in the history of the world has the stewardship of the prime means for waging a war been entrusted so completely to one mem-

ber of an alliance. He raises questions about the probabilities of general war versus limited war, pointing out that there have been relatively few general wars in history, and emphasizing that limited wars have prevailed.

He questions the possibility of waging or, once started, containing a limited war after nuclear weapons have been introduced into the battle. He visualizes a general war as one of complete destruction of one of the combatants, with the winner probably in such a condition that it cannot long survive.

The book points out that the three nations involved in the Atlantic Triangle are engaged in a purely democratic alliance, and that their furthering of the principles of democracy within their individual nations and among themselves will aid in the spread of true democracy throughout the family of nations.

CHARLES DE GAULLE. THE CRUCIAL YEARS, 1943-1944. By Arthur Layton Funk. 336 Pages. University of Oklahoma Press, Norman, Okla. \$5.00.

By MAJ QUINTUS C. ATKINSON, *Armor*

In an interesting account of the development of wartime relations between the United States and De Gaulle's Free French movement, the author covers in very readable style the "crucial years" in which De Gaulle fought for recognition as the rightful leader of the French.

Details of our relations with the Vichy government and the origins of the Fourth Republic have been covered by many writers, but few have fully covered the wartime years of 1943-44. The author has filled this void in the history of Franco-American relations. Although it ends before the period of De Gaulle's return to power, an excellent picture is given of the present French chief of state which may serve to give the reader a better understanding of the De Gaulle personality.

WEDEMAYER REPORTS. By General Albert C. Wedemeyer. 497 Pages. Henry Holt & Co., New York. \$6.00.

BY COL DAVID S. DILLARD, *Inf*

This is an extremely interesting, well-written account of General Wedemeyer's experiences during World War II and the immediate postwar years. The book embraces that entire global conflict with emphasis on the European, Mediterranean, and China arenas. General Wedemeyer's discussions of Europe and the Mediterranean are given authority by his wartime status as a senior strategic planner.

The author stands out among military writers of his era, especially in his grasp of the war in its entirety and his appreciation, from the outset, of the impact that communism and war would have on US interests in the postwar period.

Interest is intensified by General Wedemeyer's perceptive narratives of his associations with the leading international figures of the time, of his vivid accounts of strategic planning and international politics, and of his efforts to focus proper US governmental attention on the postwar era. This last matter emerges as the major theme, namely, the author's alarm over our governmental failure to look beyond mere military victory into the political realities of the war's aftermath.

He also stresses that war must have clearly defined political objectives. His account of US policy toward China during those crucial years probably is the best in existence.

While *Wedemeyer Reports* should be read by Americans in all walks of life, it is particularly valuable for the military. It provides an excellent insight into the complexities of strategic planning in wartime, a thorough education in the difficulties stemming from national interests and peculiarities in an Allied war effort, and a broad historical background of how the present world situation developed.

DICTIONARY OF ATOMIC TERMINOLOGY. Edited by Lore Lettenmeyer. 298 Pages. The Philosophical Library, Inc., New York. \$6.00.

This book is of value primarily to the student or researcher working in nuclear physics, nuclear chemistry, or nuclear weapons in more than one language. Rather than a dictionary, for it does not provide definitions, it is an alphabetical listing of word equivalents in English, French, German, and Italian.

THE MIDDLE EAST. A History. By Sydney Nettleton Fisher. 650 Pages. Alfred A. Knopf, Inc., New York. \$8.95.

BY LT COL LAVON P. LINN, *Arty*

Professor Fisher—Ohio State—has produced a readable history of the Middle East, its geographical area, and its culture and civilization.

The reader realizes when he finishes that the winning of the area requires the winning of the people. The author feels that, like a rich girl, the people of the Middle East want to be courted for themselves and not to be wooed because of wealthy oil possessions.

In 1950 Professor Fisher was certain of the eventual westernization of the Middle East. Today, he is not so sure.

The book begins with the earliest civilizations of the area and ends with the Middle East of today. More than half the volume is devoted to the last 150 years.

All but one of the 42 chapters contain complete bibliographies. Also included are 15 excellent maps. Of major interest are discussions of Mohammed and the Moslem World, the Ottoman Empire, imperialism, and the contemporary Middle East. Throughout flow two rivers, fabled and basic to the rise and fall of cultures, the Nile and the Tigris-Euphrates.

This is an excellent history for the Army officer seeking a better understanding of the Middle East and its people.

THE SOVIET REGIME. By W. W. Kulski. 524 Pages. Syracuse University Press, New York. \$8.00.

This is the third edition of an outstanding work on the Soviet Union and her internal functioning which was published originally in 1954. The second edition was reviewed in the *Military Review* of January 1958.

This edition has been revised carefully and includes an analysis of the decisions reached at the 21st Party Congress held in 1959. Material included is exclusively from Soviet sources and a 36-page bibliography provides the serious student of the Soviet Union and her people with a wealth of references.

ISLAM AND THE ARABS. By Rom Landau. 299 Pages. The Macmillan Co., New York. \$4.95.

By LT COL MARK H. TERREL, *Inf*

Although we pride ourselves on the theory that the average American is about the best informed, most up to date, least likely to be surprised individual on earth, there is one area of human activity in which most Americans are lacking in knowledge. It is to increase our understanding in this area that Rom Landau, Professor of Islamic and North African Studies at the College of the Pacific in California, has put together this book.

In a well-written flow of clear English, it discusses the background of Islam, the history of the Middle East, and the philosophy, sciences, literature, arts, and politics that make up the operational environment from which the current potential explosions in that area are brewed.

To help the student who is unfamiliar with the background of the area, the author has included detailed chronologies by date, important participants, and parallel events in the Western World. These make it possible to determine how activities with

which we are familiar tie in with the Moslem histories with which we usually are not.

He also has included a very detailed index and a complete bibliography which permits using this book as a basis on which to build further research. He has analyzed some of the problems of the present Arab world and the complications that may grow out of them.

The book is written clearly with a reasonable understanding of our resistance to learning something new, and has a historical plot and suspense that adds immeasurably to reader interest.

PRUDENT SOLDIER. A Biography of Major General E. R. S. Canby, 1817-1873. By Max L. Heyman, Jr. 418 Pages. The Arthur H. Clark Co., Glendale, Calif. \$11.00.

By MAJ ARLAND H. WAGONHURST, *Inf*

It would appear irreverent to record that General Canby is best known as the first US Army general to be killed by an American Indian. Yet this act is historically correct, and Canby's murder by Captain Jack brought the rapid dissolution of the entire Modoc tribe.

Prudent Soldier is an appealing biography of a man who devoted his entire life to patriotic, untiring service to his country. General Canby's career reached its apogee during the last year of the Civil War and the reconstruction years which followed. He walked in the shadow of men like Sherman, Sheridan, McDowell, and Wallace. Canby's contribution to the cause of duty, honor, and country measures high with these comrades in arms.

This biography is vivid with details of Army life. The author has depicted his subject with zest and color and, as a result of obvious careful and thorough research, has presented Canby as truly a prudent soldier, "as the 'remarkable instance' of an officer who was without enemies in his profession."

THE STATESMAN'S YEAR-BOOK 1959. Statistical and Historical Annual of the States of the World for the year 1959. Edited by S. H. Steinberg, Ph. D. 1,673 Pages. St. Martin's Press, Inc., New York. \$9.50.

Of great value to the writer and researcher requiring a convenient reference source of information on international organizations and national governments is *The Statesman's Year-Book*. Revised annually, the book is a statistical and historical compilation showing key political figures, area and population, governmental structure, production and resources, and other relevant factors on each nation. It is recommended as a desk reference for the military writer.

I FOUGHT WITH GERONIMO. By Jason Betzinez with W. S. Ney. 214 Pages. The Stackpole Co., Harrisburg, Pa. \$4.95.

By MAJ DONALD F. BLETZ, *Inf*

Unlike most accounts of the "Old West," this book is written from the point of view of the Apache Indian. The source material is not documentary but is the active memory of the author. Jason Betzinez—a full-blooded Apache who, as a youth, was on the warpath with Geronimo—tells his story well.

The book opens with an account of a massacre of an Apache band by supposedly friendly Mexicans, related by the author as it was told to him by the elders of his tribe. He uses this chapter to set the tone for what is to follow.

The 20 intermediate chapters are filled with a never dull account of the life of the Apache Indians.

In his account of his early life the author depicts the primitive life of the Indians and gives many interesting bits of information about their ways. He also dispels many of the most common misconceptions about his people.

He describes the surrender of Geronimo and the period of Apache history when the

entire band was held prisoner of war by the United States. The long suffering and final settlement of the Apaches on an adequate reservation after being freed from the status of prisoners of war is well-portrayed.

In the closing chapter the author tells of the peace and happiness which he and his wife finally achieved in their home near Fort Sill.

The book is well-written and makes for enjoyable and informative reading.

THE MILITARY LEGACY OF THE CIVIL WAR. The European Inheritance. By Jay Luvaas. 253 Pages. The University of Chicago Press, Chicago, Ill. \$5.95.

By MAJ EDWIN J. MCCARREN, *Armor*

In this book Jay Luvaas presents a new and interesting treatment of the Civil War. Rather than an analysis of a battle, campaign, or cause, the author presents the observations and views on the Civil War of the better known British, German, and French military observers.

He analyzes the impact of the Civil War on the military organization and tactical doctrine in each of these countries during the period 1861-1914.

This discussion is followed by an interesting view of the Civil War from experience gained in World Wars I and II and concludes that in the light of history, lessons could have been learned from the Civil War which may have offered solutions to problems encountered in later wars.

This unique approach opens to the student facets of research which might not otherwise be readily available. This volume is well-written, interesting to read, and particularly well-documented and indexed. It should prove to be of considerable value not only to the student of the Civil War, but also to those interested in the evolution of European army organization, equipment, and tactics.

TURNCOATS, TRAITORS AND HEROES. By John Bakeless. 406 Pages. J. B. Lippincott Co., Philadelphia, Pa. \$6.50.

BY LT COL HAROLD E. BEATY, CE

George Washington could and did lie, but all his falsehoods were carefully constructed and erroneous military intelligence, which his spies passed over to the British. He lied, oh how he lied, but only for his country's sake.

Thus Dr. John Bakeless expresses himself in this book. When George Washington or his staff gave out incorrect information, it was done always with exceeding care in order that the falsehoods reach British headquarters from more than one apparent independent and widely separated source. This made the information seem more accurate. Washington knew that certain Tories were sending information to the enemy; however, he permitted them to continue as this helped the Americans to supply wrong information.

Turncoats, Traitors and Heroes is a complete and thorough study of the espionage, counterespionage, and other military intelligence services in the Continental and British Armies in America during the period of the American Revolution. The author has been careful to include only a few absolute essential references to military intelligence elsewhere. This book is a result of four years of intense research and nearly 20 years of study of history of this particular period. In order not to overextend himself, Dr. Bakeless confined his work strictly to the intelligence service of the Continental and British Armies. More than half this work is based on previously untouched sources.

For the first time, Dr. Bakeless has revealed new characters and fascinating accounts of espionage which stimulate the reader. Additionally, he has disclosed previously unknown material which sheds new light on such well-known incidents as the

Nathan Hale tragedy and treason of General Benedict Arnold. Unsung heroes, notable personages, scoundrels, and shady characters, both American and British, are treated equally in this narrative.

Readers of all ages and divergent interests will find this well-written book highly interesting and absorbing. It provides excellent background to the study of American history during the Revolutionary War.

BEYOND SURVIVAL. By Max Ways. 250 Pages. Harper & Brothers, New York. \$4.00.

BY MAJ JAMES J. FORD, QMC

This work should be studied, not read. The task will not be an easy one, and a dictionary close at hand will help in its accomplishment. For every officer who views his responsibility as going beyond the technical manipulation of troops and materiel, however, the book is invaluable.

In the text, and in the excellent bibliographical notes, the author presents an evaluation of the important writing in the field of American policy during the past 15 years. Here is an opportunity to review the thinking of statesmen, scholars, and intellectuals concerning our national dilemma. Further than this, the book pleads for "a set of public beliefs and values," to prevent the Nation's being "starved to death for lack of premises and purposes."

The author deplores the country's sole reliance on "massive retaliation," and the lack of purpose in our national consciousness "beyond survival." His thesis is that our lack of a coherent, continuing national policy is not solely the fault of our political leaders, nor of the people, but instead "in the way these two are connected." He calls for a reawakening of the philosophy of action proclaimed in our Constitution and our Declaration of Independence, toward a world order based on law and objective morality.

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